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THE NEW AMERICAN NAVY





Drawn by Henry Reuterlahl

**ADMIRAL DEWEY ON THE FOREBRIDGE OF THE OLYMPIA
DURING THE BATTLE OF MANILA BAY**



©

THE NEW AMERICAN NAVY

BY

JOHN D. ^{GOV'T}LONG
SECRETARY OF THE NAVY
1897-1902

*ILLUSTRATED WITH DRAWINGS BY HENRY
REUTERDAHL AND WITH PHOTOGRAPHS*

VOLUME I



NEW YORK
THE OUTLOOK COMPANY
1903

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PREFACE

SINCE the war with Spain our navy has steadily strengthened the hold which it already had on popular sentiment. Its brilliant record at that time, its substantial consummation of the war by the unprecedented thoroughness of its victories at Manila and Santiago, the clean and creditable conduct of its commissioned and civilian officials in charge of its business affairs, and the necessity of its expanded equipment and service by reason of our added insular possessions, have stimulated the feeling of national interest in it and dependence on it. These have also led to most generous appropriations by successive congresses for its continued increase in officers and men, in ships, and in all the facilities of naval construction. The object of this volume is to give information as to the start and progress of this increase, the development into what is now called the New Navy, as well as to tell of its recent exploits.

With this purpose there has been an attempt not so much to make a picturesque story as to

give an idea of the work done in the last half-dozen presidential terms by earnest members of Congress, by successive secretaries of the navy, by naval officers and seamen ; also of the many arts that enter into the construction, armament, and equipment of our men-of-war ; of the organization and administration of the various bureaus of the Navy Department, the great busy navy-yards, and the steadily bettering life of all on shipboard ; and of the achievements by which officers and enlisted men have added so much luster to the already shining record of the American navy. My regret is that in referring to some of these achievements in connection with recent naval operations, I have omitted so many. But where merit has been the rule, it is impossible to mention every desert unless almost every name on the roll and action on the record be specified.

Very likely a sailorman would better treat all these topics than a civilian. The latter, however, is so far disinterested that his praise cannot be charged to bias in favor of his own calling. As Secretary of the Navy from the fifth of March, 1897, to the first of May, 1902, I had an opportunity to be impressed by the fine spirit, the loyal, patriotic impulse, the scientific and mechanical attainments, the courage, devotion, and service of the men of the navy. These qualities,

PREFACE

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and not the frictions, foibles, and faults which are a part of all human nature, have given them their notably high character. Associated with them I felt their tremendous power as a mighty arm upholding the honor of the country; retired from that association I regard them with undiminished admiration and confidence.

JOHN D. LONG.

HINGHAM, Mass., July 15th, 1903.



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THE NEW AMERICAN NAVY

I

THE BIRTH OF THE NEW NAVY

THE Forty-seventh Congress, during its sessions of 1881-82 and 1882-83, authorized the construction of three steel cruisers and one steel dispatch boat. These ships were the nucleus of the New American Navy, the development of which in peace has potently aided the upbuilding of numerous industries of the nation, and the achievements of which in war rival in glory and results those for which the Old Navy is justly famous.

Spain suffered crushing defeat in 1898 because she was not ready and because the United States — comparatively only — was ready for the combat. Before the shock of conflict, the former's fleets appeared formidable in comparison with our own. The battles of Manila and Santiago, and the futile efforts of Spain to form a squadron

strong enough to effect the relief of her ultramarine dependencies, showed that her sea force was practically in a state of weakness and inefficiency. Fortunately for us, the pitiable decrepitude existing sixteen years prior to the recent test of the naval arm of our government had aroused the country, and regeneration had followed the awakening. Victory over the foe of 1898 must be attributed, therefore, in some measure to the patriots who foresaw their country's need and with characteristic energy and push took measures which enabled her to meet it.

The lesson of the need of preparedness is taught by our whole naval history. No war has found the American navy fully prepared to undergo its test; but that with Spain clearly demonstrated that never before in our history was the service on the whole in so efficient a condition. The Declaration of Independence brought troops and men-of-war into being, but when the object of the Revolution had been achieved they disappeared, and a peace-loving people resumed the ways of peace. Depredations committed by Algerian corsairs and burdens imposed upon American commerce and other disputes which imperiled our relations with Great Britain and France in the closing years of the eighteenth century forced the creation of a navy. The Con-

stitution, — dear Old Ironsides, — the Constellation, the Essex, the Enterprise, and other frigates and sloops of war, which were the first imposing naval guardians of American honor, taught wholesome respect for the flag in the West Indies and the piratical Mediterranean; and in the second war with Great Britain, due among other causes to British impressment of American seamen, they saved the nation by victories afloat which offset defeats ashore. Both in the war of the Revolution and of 1812, however, our privateers, the scourge of British commerce, were not the least factors in our success. The war with Mexico, caused by lust of territory, and yet, as so often happens, resulting in the development of beneficent territorial enlargement, involved no struggle for sea supremacy; but had the United States become simultaneously involved in hostilities with either Great Britain or France, as was apprehended, the navy would have experienced grave difficulty in protecting the Atlantic and Gulf coasts, and lending assistance to the army operating in Mexico. Later, the rumblings of the Civil War preceded the lightning flashes of that titanic struggle, and though Mr. Toucey, Secretary of the Navy in Buchanan's administration, urgently advised the addition of improved ships, Congress failed to act. Had the Federal

Government been possessed of a fleet equipped with the latest appliances even in that day available for service, the firing on the flag at Sumter would have been the signal for the institution of an effective patrol of the coasts of the seceding States; shipments of cotton abroad and the importation in return of munitions of war would have been minimized, and the Rebellion would have been suppressed in a shorter time than the unprepared condition of the North necessitated. Maintenance of the Union and prevention of foreign complications required the construction of a navy capable of blockading the numerous ports of the Confederacy. War-ships were improvised, but at a terrible cost to the merchant marine. Prior to the Civil War, two thirds of the foreign trade of the United States was carried in ships flying the Stars and Stripes. Our shipping represented 5,350,000 tons, which was valued at \$275,000,000. The extraordinary character of the emergency demanded that much of this tonnage should be impressed into the naval and military services. One million eight hundred thousand tons were taken, and one hundred million dollars withdrawn from the capital embarked in the shipping industry. The Alabama, the Confederate tiger of the sea, destroyed one hundred thousand tons of shipping, and caused

the owners of vessels to seek foreign registries or tie their craft to the dock rather than send them unprotected on voyages which were likely to end in the prize court or destruction by fire at sea. Foreign ships and foreign capital eagerly entered the industry which the United States was compelled to abandon. From the damage inflicted upon our merchant marine during the Civil War there has been, as yet, no full recovery; and the stupendous increase in our foreign trade is the more remarkable in view of the fact that it has been effected in spite of the disadvantage of its conveyance in ships flying the flags of other nations than our own.

In the light of the teachings of almost a hundred years it seems strange that the country should not have realized, when the Rebellion ended, the necessity of a permanent navy of sufficient strength adequately to protect American interests. American men-of-war had aided in the impetus to the European movements for more liberal government. They had served as the agent of civilization in aiding in the suppression of piracy and the slave trade. They had protected commerce by the display of the flag in distant lands. The institution of hydrographic research and the surveys of the highways of the oceans and coasts of our own and friendly

countries had facilitated trade expansion. The inadequacy of their number at the outbreak of the Rebellion was responsible for the practical annihilation of the merchant marine; but when a large fleet was gathered they nobly did their share of the exhausting work which the preservation of the Union imposed.

A reduction of the naval force when the Rebellion terminated was then inevitable, for an unmilitary people like the United States was conscious of no desire or need for immense fleets. To cope with the tremendous task which the Rebellion set the North, Secretary of the Navy Welles constructed or began the construction of 208 war-vessels and purchased 418 ships of the merchant marine. An inventory of the navy when hostilities ceased showed that most of these ships were unfit for war purposes, because of the use of unseasoned timber, of structural defects, or of hasty construction, and they were sold. Some of the best ships were, however, wisely retained. But the nation was eager to lay aside its arms and turn to the solution of the problem of reconstruction and the development of its internal resources. It was enough that when ships were needed they had been acquired. Appropriations were voted to some extent for maintenance, but not for increase. Nor, at a

time when a navy could be rendered obsolete by the invention of an improvement in an instrument of war, was the policy without some justification from an economical point of view, though involving a good deal of risk to a country the foreign trade of which had begun to recover from the injuries war had dealt it, and the contact of which with foreign nations furnished many points of friction. The Alabama claims were a fruitful source of contention with Great Britain. The Virginius affair almost precipitated war with Spain and caused the mobilization in southern waters of a fleet which consisted in great part of antiquated and rotting ships and gave no promise of the splendid possibilities of the magnificent squadron assembled at Key West a quarter of a century later for its now historic dash on Cuba. The revolution in Cuba known as the Ten Years' War caused great injury to American life, American property, and American trade, and there prevailed in this country, to Spain's intense indignation, that keen sympathy for the rebels which our people are always inclined to extend to a people striving to be free. The lack of an efficient navy also caused some embarrassment in dealing with French pretensions in connection with the Panama Canal.

Geographical situation has been and is a

strategic advantage of the greatest importance to the United States. Our compact coast line and absence of interest in foreign waters caused the early naval builders of our country to decide not to imitate Great Britain and France in the construction of large and costly fleets, but to assemble a force which should comprise ships of the very best types in their respective classes. This policy produced results dear to every patriotic heart. By their victories, American frigates proved their superiority in sailing qualities and armament. To the United States belongs the credit of first recognizing the value of steam for war purposes, and, in spite of strenuous opposition, war-ships propelled by this new motive power were added to the navy.

A voluntary exile from his native country, and finding England inhospitable to his inventions, Ericsson came to the United States and produced the first effective screw-propeller man-of-war — the Princeton. With her machinery below the water line, and consequently safe from an enemy's fire, the Princeton marked a long step in advance in naval construction. The nations of Europe, as they had done before, followed America's lead. Great Britain discarded her wooden sailing ships and constructed a fleet of wooden steamers. The heat of the boilers and engines

caused dry rot, and many of the ships were worn out after three years' service. The "wooden walls of England" were tottering. Then came the iron ship, with its power of resistance to the gun in use, and Great Britain hastened to provide herself with this latest type of naval development. But the machinery required for the propulsion of these awkward craft occupied so much space that the amount of coal which their bunkers accommodated was sufficient for only six days' steaming. The restless spirit of invention produced the compound engine, which was compact, consumed comparatively little coal, and was capable of driving a ship at the same speed with greater economy. The armored ship, a slightly earlier advance in naval construction, was a device of the American genius of war, but the French were the first to show its practical value. The need of this type of craft was demonstrated by the Ericsson wrought-iron gun and by the battle of Sinope, in which Russian ships, using explosive shells, set on fire and destroyed a Turkish squadron which fired only solid shot. In the Crimean War France sent floating batteries, protected by four and one half inches of iron, against the Russian forts at Kinburn. Though hulled repeatedly, the vessels sustained no damage except slight dents in their

stout metal plates. Having developed armor which could resist the gun, attention was in turn given to the construction of a gun which could perforate the armor. The thickness of the plates was increased. The caliber of the gun kept pace with it. Soon the weight of the armor was so great that the ships became unwieldy. The gun was transformed from a smooth-bore into a rifled weapon, by this means giving higher velocity, a flatter trajectory, and greater accuracy to the heavier projectile — essential requisites of penetration. Rapidity of fire was obtained by the introduction of the breech-loading system. The gun retained the advantage, but its superiority only emphasized the necessity of protection.

The gun was still in the muzzle-loading stage in the United States navy when the first battle of iron ship against iron ship occurred. The Merrimac and the Monitor were the contestants in this historic struggle. It was a duel of prime national importance. From an international point of view, however, it possessed far greater significance. Before the appearance of the Monitor, the Merrimac had destroyed the Congress and the Cumberland, and had by her victory demonstrated that the era of the wooden sailing ship had closed and the era of ironclad steamers had begun. The action with the Monitor showed

that ironclad must fight ironclad in order to retain physical equality. These astounding conclusions forced the immediate construction by Europe of new and more powerful navies. Commenting editorially upon the effect of the battle, the London "Times" said: —

Whereas we [Great Britain] had available for immediate service 149 first-class war-ships, we now have two, these two being the Warrior and her sister the Ironsides. There is now not a ship in the English Navy apart from these two that it would not be madness to trust to an engagement with that little Monitor.

Iron is the link between wood and steel in naval construction; its quick passage from use as the material for the construction of hulls and the protection of ships was due to the development of the gun and the demonstrated superiority of steel. The latter metal possesses greater tensile strength and ductility, and furnishes increased immunity from damage by grounding or collision. A competitive test of iron and steel plates at Spezzia, Italy, proved that steel was the future metal of ship protection.

Improvement had succeeded improvement with such bewildering rapidity as to provoke grave doubts and the widest difference of opinion among American naval experts. This was one of the important reasons for the failure of Con-

gress to appropriate money for new men-of-war even when the country was confronted with the danger of strained relations with Great Britain, Spain, and France. The diverse views which were expressed formed the basis for humorous criticism in the House of Representatives when the question of authorizing the first ships of the New Navy was under discussion. Representative Belford, of Colorado, remarked that the debate reminded him of a sermon he once heard delivered by a distinguished African preacher.

“‘Brethren,’ began the minister, ‘we have assembled here on the sacred Sabbath Day to discuss great and sacred questions. In the first place, I will proceed to discuss some matters about which I know a little and ~~you~~ know nothing. In the second place, I will proceed to discuss matters concerning which you know a little and I know nothing. We will then conclude with elaborate dissertations on questions about which none of us know anything.’”

Mr. Belford’s ridicule was not entirely deserved, for there were members of the House and many citizens who fully appreciated the utterly inefficient condition of the navy and who sought to have the remedy promptly administered. They had observed with grave disapproval the parsimonious policy of Congress which had forced

the Navy Department, in order to maintain its service, to resort to the subterfuge of rebuilding men-of-war under their old names and paying for their construction out of the appropriation for "repairs" and with moneys obtained from the sale of condemned ships. This action on the part of Mr. Robeson, Secretary of the Navy in President Grant's administration, was not altogether without the patriotic motive of preparing for possible foreign war, but it subjected him to severe attack by the opposition majority in the House of Representatives. During the Hayes administration the country learned with dismay that our navy was inferior to that of any European and at least one South American power, and that little Chili, triumphant over Peru, could send her Almirante Cochrane and captured Huascar against San Francisco, and the United States would be unable to repel them. An examination of our navy list of 1879 shows that there were five steam vessels classed as first-rates, which had been built twenty-five years before and which were then obsolete and practically useless as men-of-war; twenty-seven second-rates, of which three lay on the stocks, rotten and worthless, seven were in ordinary unfit for repair, and only nine were actually in condition for sea duty; twenty-nine third-rate steam ves-

sels, of which fifteen only were valuable for naval purposes; six fourth-rate steam vessels, none of which was of account as a war-ship; twenty-two sailing vessels, but five of which could even navigate the sea; twenty-four ironclads, fourteen of which were ready for effective service; and two torpedo-vessels, one of which was described as "rather heavy for a torpedo-vessel, not working so handily as is desirable for that purpose," and the other, known as the Alarm, was in the experimental stage. During my administration the Alarm was sold as old iron. Of the one hundred and forty-two vessels which comprised the navy when Mr. Hayes was President, but forty-eight were available for immediate service and sixty-nine capable of carrying guns and fighting in defense of the country. In the entire navy there was not a single high-power, long-range, rifled gun! Congress passed a law in 1883 prohibiting the repairing of any wooden man-of-war the expense of which should be more than twenty per cent. of the cost of the construction of a new ship of the same type and displacement. The operation of this law caused forty-six vessels to be immediately dropped from the service. Congress subsequently directed that no wooden vessel should be repaired when the cost of repairs was in excess of ten per cent. The observance



Photograph by Clinedinst

HON. W. H. HUNT

Secretary of the Navy under President Garfield

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of this policy has removed from the navy list many of the old ships of memorable achievements, and an examination of the register to-day shows the names of but a few of the mighty fighters of the past. Those still carried on the register are used as training or receiving ships. The double-turreted monitors Puritan, Miantonomoh, Terror, Amphitrite, and Monadnock, reconstructed as a part of the New Navy, are the only vessels laid down in the period of iron and wood which are capable of rendering effective service.

The birth of the New Navy occurred in the administration of President Arthur. "I cannot too strongly urge upon you my conviction," he said in his first annual message, "that every consideration of national safety, economy, and honor imperatively demands a thorough rehabilitation of the navy." Secretary of the Navy Hunt reinforced this utterance by stating in his annual report that it was a "source of mortification to our officers and fellow countrymen generally that our vessels of war should stand in such mean contrast alongside of those of other and inferior powers," and he asserted that the matter required the "prompt and earnest attention of Congress." Two months later Secretary Hunt made a still stronger appeal to the House Naval Committee.

"The creation of a navy," he said, "is a subject which naturally attracts present attention, from the fact that our relations on the Isthmus and our interests may be said to have reached a critical point. It seems to be the pretty well settled opinion of our people that we cannot afford to give up the right of free way across the Isthmus to any foreign power. It seems to be well settled that with our vast possessions on the Pacific, increasing rapidly in population as they are, in population and development, we should have some sure mode of communication across that Isthmus which we may call our own, and which we must, at least for a time, manifest the ability to protect. In order to afford such protection, the construction of the nucleus of a New Navy obviously becomes an imperative necessity."

The country was ripe for the recommendations of the President and the Secretary of the Navy. With a unanimity both surprising and gratifying to the administration, the press supported the recommendations, and in so doing it reflected the real sentiment of the people. Before making any suggestions for the reconstruction of the navy, Secretary Hunt had previously, with the approval of President Garfield, appointed the Naval Advisory Board, which was directed to prepare a "practical and plain statement of the

pressing need of appropriate vessels in the service at the present time." This board comprised some of the ablest officers of the navy. They were: Rear-Admiral John Rodgers, President; Commodore William G. Temple, Captain P. C. Johnson, Captain K. R. Breeze, Commander H. L. Howison, Commander R. D. Evans, Commander A. S. Crowninshield, Lieutenant M. R. S. Mackenzie, Lieutenant Edward W. Very, Chief Engineer B. F. Isherwood, Chief Engineer C. A. Loring, Passed Assistant Engineer C. H. Manning, Naval Constructor John Lenthall, Naval Constructor Theodore D. Wilson, and Naval Constructor Philip Hichborn. Credit belongs to this board, not only for the part it played in the regeneration of the navy, but for its recommendation that steel be used as the material for the hulls of men-of-war — a recommendation that facilitated the development of one of the greatest of American industries.

The navy list of 1881 was scanned by the Advisory Board, and it reported that of the sixty-one unarmored cruising vessels composing the apparent effective force of the service, but thirty-two were available or could be made so at a cost low enough to warrant the expenditure. The necessities of the country required, in the opinion of the board, the watchful care of seventy cruising

vessels, and it recommended that thirty-eight unarmored cruisers should be built. It also advocated the construction of five steel rams, five torpedo-gunboats, ten cruising torpedo-boats, and ten harbor torpedo-boats. Of the vessels of the cruiser type, it proposed that eighteen should be of steel and twenty of wood. The recommendation that steel be used for some of the projected ships was strenuously opposed — strangely enough — by Naval Constructors Lenthall, Wilson, and Hichborn, and Chief Engineer Isherwood. The majority advocated it because of “the impetus that such a step would give to the general development of steel manufacture in this country,” and “for the reputation and material advantage of the United States it is of prime necessity that in this country, where every other industry is developing with gigantic strides, a bold and decided step should be taken to win back our former prestige as the best shipbuilders of the world.” The minority were not so optimistic as their brother officers. They urged that iron be used instead of steel because the material sold for steel was simply a high quality of iron made at greatly increased cost from cast ingots. The report of the minority is interesting as showing the view taken by many people of the American steel industry.

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“We assume,” it stated, “that the great national vessels proposed are to be constructed of materials manufactured in the United States, and not imported from Great Britain. Before this material could be constructed of this mild steel, the manufacture of that material would have to be created in this country; enormous plants, at correspondingly great cost, would have to be obtained, and workmen would have to be educated to their use; also, as there is now no demand for this kind of steel for shipbuilding in the United States, the cost of educating the workmen and creating the plant to produce it would have to be entirely borne by the few naval vessels that might be constructed of it. Should mild steel be insisted on for the hulls of these vessels, the contracts for it would probably fall into the hands of a few middlemen or speculators, who, instead of having it manufactured here, would import it, while receiving for it an excessive price, based on what would be the reasonable cost of its manufacture here. Under these circumstances no reasonable approximation can be made of the increased cost of our vessels if built of mild steel instead of iron, but evidently the increase would be very great.”

How different is the result from that anticipated by the gentlemen who signed the above

statement! At the time the report was made the United States ranked as the second country, and, it was claimed, the first, in the extent of its steel manufactures. Certainly to-day no nation in the world can compete with it in this industry. American rails may be said to gird the earth; American steel bridges span the rivers of Europe, of Asia, and of South America; American machinery is used in every country. In 1880 there were 140,798 persons employed in the iron and steel industry of the United States. Twenty years later this number had increased to 226,161. The value of the iron and steel products in 1880 was \$296,557,685; in 1900 it was \$835,759,034. The navy has played no inconsiderable part in the development of this gigantic industrial movement, which is another evidence of its close relation to the development of the industrial lines of peace.

The recommendation of the majority of the Naval Advisory Board limited the use of steel to eighteen vessels. The House Committee on Naval Affairs went even further. Congress had received with every evidence of gratification the recommendations of the President and Secretary Hunt. In the elections of 1880 the Republican party had succeeded in wresting from the Democrats the control of the House, which the latter



Photograph by Clinedinst

HON. WILLIAM E. CHANDLER

Secretary of the Navy under President Arthur



had held since 1875. It is a tribute to the wisdom of the party that its representatives placed behind them all memory of the policy of fault-finding with the navy, which their political opponents had observed, and addressed themselves to the work which the country considered so essential and to which the President had invited particular attention. One of the important results of the change of complexion of the House, so far as the navy was concerned, was the assignment of Benjamin W. Harris, of Massachusetts, to the chairmanship of the Naval Committee. Mr. Harris was a close student of naval affairs and an untiring worker. He had entered the Forty-third Congress, and in the Forty-fourth, Forty-fifth, and Forty-sixth congresses had served as a member of the minority of the Naval Committee. His thorough knowledge of matters before it and his consequent equipment for debate caused him to become the leader of his party in replying to attacks upon the Republican administration of the navy. Indeed, his Democratic colleagues on the committee worked with him, when the control of the House passed to the Republicans, to achieve the rehabilitation of the service. As chairman of the committee, Mr. Harris labored zealously. He and other members of the committee made a careful investi-

gation of the condition and needs of the navy, and, after the receipt of the report of the Advisory Board, conducted a special inquiry into the iron and steel manufacturing industry, the commercial expansion of the United States, and the shipbuilding industry. Prepared by the facts thus collected, the committee, in a report which its chairman submitted to the House in March, 1882, announced that no maritime nation was less able to wage war than the United States. Steel was recommended "without hesitation or doubt" as the "only proper material for the construction of vessels of war." The committee was not willing to advocate the adoption of the entire shipbuilding programme of the Advisory Board, — probably on the ground that it was not expedient as a matter of parliamentary success to ask so much, — but urged Congress to appropriate money for the construction of two cruisers capable of an average speed of fifteen knots, four cruisers capable of an average speed of fourteen knots, and one steel ram. The Advisory Board had recommended that five rams be authorized, but the committee was not disposed to advocate the building of more than one, because it considered the type experimental. The failure of the *Katahdin*, the name given to the ram built, furnishes evidence of the excellent judgment of the committee.

Congress was not even prepared to go to the extent in increase advocated by the committee. The Act of August 5, 1882 (the Hon. William E. Chandler having then become Secretary of the Navy), which act may be said to be the measure which brought the New Navy into existence, provided for only "two steam cruising vessels of war . . . to be constructed of steel of domestic manufacture . . . said vessels to be provided with full sail power and full steam power. One of said vessels shall be of not less than five thousand nor more than six thousand tons displacement, and shall have the highest attainable speed ; . . . one of said vessels shall be of not less than four thousand three hundred nor more than four thousand tons displacement." No appropriation was made for carrying this act into effect, and, besides, what is known as the Second Naval Advisory Board, organized in accordance with another provision of the same law, recommended that the larger ship be not built, on the ground that such a vessel was not then necessary, and that it would be advisable to begin the New Navy with ships of moderate tonnage. The board suggested that Congress authorize the construction of five vessels—one of about 4000 tons, and three of about 2500 tons, to be built of steel, and one iron dispatch-

boat of about 1500 tons. At the second session of the Forty-seventh Congress an act was passed, approved March 3, 1883, which provided for the construction of the several vessels recommended by the board, with the exception of one of the medium-sized steel cruisers. That Congress fully intended that the private enterprises of the country interested in ship construction should participate in the industrial advantages connected with the building of the New Navy is shown by the provision in the act of authorization that the Secretary of the Navy "shall invite proposals from all American shipbuilders whose shipyards are fully equipped for building or repairing iron or steel steamships, and constructors of marine engines, machinery, and boilers."

✓ The ships constructed under this act were the Chicago, Boston, Atlanta, and Dolphin. In the war with Spain the Chicago and Atlanta were undergoing repairs; the Boston participated with other ships of Dewey's command in effecting the destruction of Spanish power in the Far East; and the Dolphin performed blockade service in Cuban waters. These vessels exercised, however, a far more important influence than that growing out of participation in war. Their construction entirely of American material furnished employment for hundreds of men




Drawn by Henry Reuterdahl

THE WHITE SQUADRON AT SEA



and distributed several millions of dollars among the people. Furthermore, they marked the resumption of the old policy of the United States of providing itself with the best weapons of defense, and gave commerce practical assurance of protection in its future operations and exploitation, and American citizens promise of defense of their lives and interests in foreign lands. At the time of their completion there had been a change in the political administration, and one of the least creditable acts of the first Cleveland administration was its unjust depreciation of some of them — a depreciation which, by their splendid record of long and efficient service, has been shown to be utterly unfounded or founded only on mistaken partisanship.

The New American Navy — a lusty youngster — was born.



II


BUILDING THE NEW NAVY

THE New Navy of the United States was launched in the waters of uncertainty. The training of centuries had bred a reliance on wind as the motive power for ships which forty years of experience with steam had not dispelled. Though steel had been adopted for the hulls of merchant steamers and parts of war-ships constructed abroad, there was apprehension whether plates of sufficient tensile strength and ductility could be manufactured in the United States. Besides, the cost of steel and its propensity to corrode and foul in salt water were objections urged against its use for men-of-war. The country was pitifully lacking in large private shipyards, and it was asserted that there would be no real competition between shipbuilders.

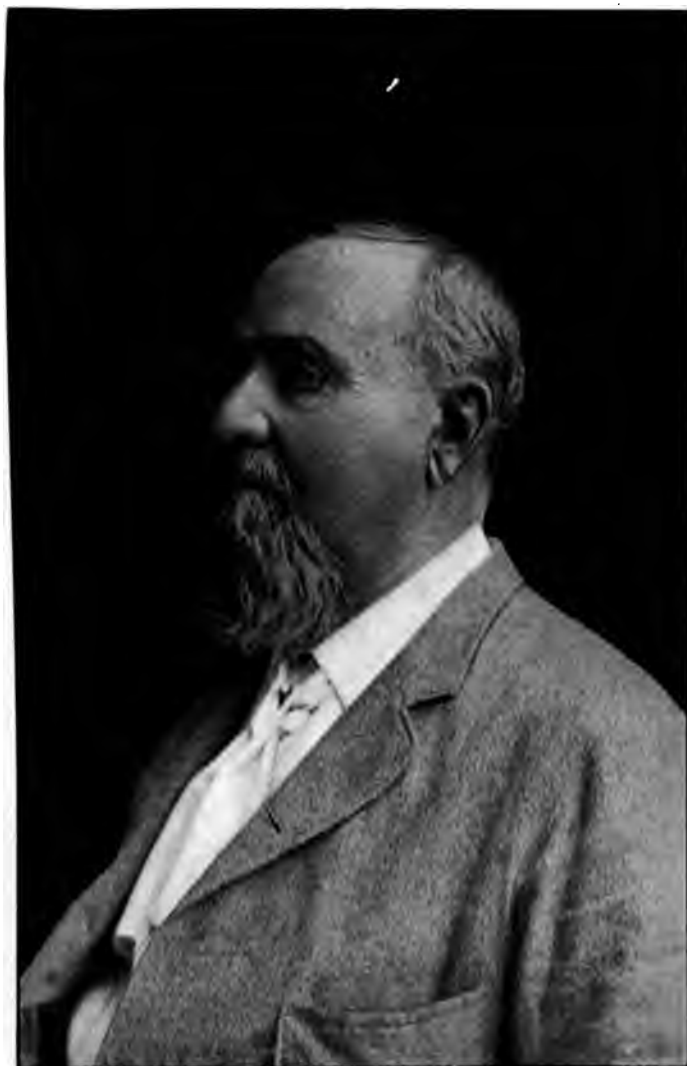
Under the practice of a century, navy-yards were regarded as the proper places to construct vessels, though it was recognized that those existing were ill equipped with tools for working in steel, and that political corruption and favor-

itism flourished vigorously within their limits. So deplorable was their condition in this respect that it was charged, with some show of truth, that, instead of being maintained for the sake of the ships, the ships dragged out a protracted existence for the sake of the yards.

When the United States laid the keels of the first ships of the New Navy, it was in this, as in other departments of naval science, far behind foreign maritime nations. Europe had discovered the superior combustibility of bituminous coal and was equipping war-ships with furnaces for its use. The United States was content to burn anthracite, notwithstanding the inferiority of this variety and the known existence of bituminous coal within its borders. Attention had been especially given abroad to water-tight subdivision, drainage, ventilation, forced air drafts, etc. At home, beyond slight improvements in ventilation, no progress had been made in these important branches of ship construction. Our machinery was lamentably inferior to that in the navies of foreign nations. We had not begun the regular use of compound engines, and were still building and installing old-fashioned boilers. Experiment and war had supplied Europe with rifled guns of high power. Our country had only reached the point of inserting rifled tubes



in its antiquated smooth-bores. Rapid-fire guns, capable of penetrating the sides of any of our ships from a distance of two thousand yards, looked threateningly through the ports of European men-of-war. There were not a dozen of these weapons in the American navy. The Hotchkiss rapid-fire gun, which was introduced into foreign services, was the invention of an American, who, unable to induce his own government to adopt it, had been compelled to exploit it abroad. Even the renowned Ericsson, to whom the country was so deeply indebted, failed of recognition from the Navy Department, and at the age of eighty-three years was forced to turn to other governments for encouragement. Inventors and manufacturers were spurred to the achievement of greater triumphs for the benefit of Europe. There was no incentive in this country to naval development. In the seventeen years following the close of the Civil War, Europe spent more than two billion dollars for the maintenance of her navies, and almost four hundred million dollars in their development. In the same period the United States expended three hundred million dollars, most of which was disbursed for maintenance, while a good share of the rest was wasted. Admiral David D. Porter expressed the European view of the United



Photograph by C. M. Bells

THE LATE REAR-ADMIRAL ROBERT W. SHUFELDT

President of the Second Naval Advisory Board in 1882

States when he said that "foreign nations laugh at us, and say we can neither go to war nor defend ourselves from attack, because we cannot build ships nor make guns." This contemptuous attitude was due to our feeble naval condition, and also to our dependence upon Europe for ship material, — a condition that no longer exists and is not likely to exist again in this generation.

Thus, while the United States was known to possess boundless resources, the energy and ability to develop them had not yet fully manifested themselves. The country was undoubtedly anxious for a navy — not a large one, but an establishment built up along the lines of the old policy of creating the most effective ships of their respective classes and in sufficient numbers to protect expanding American interests.

The Act of 1882, which authorized steel ships that were never built, provided for the organization of the Second Naval Advisory Board, two of the members of which it specified should be civilian experts. The naval officers appointed on the board were Commodore Robert W. Shufeldt, designated as president; Chief Engineer Alexander Henderson, Commander J. A. Howell, Lieutenant Edward Very, and Naval Constructor F. L. Fernald. The two civilians appointed were Mr. Henry Steers, ship architect, and Mr.

Miers Coryell, marine engineer. Assistant Naval Constructor Francis T. Bowles was appointed secretary of the board. Commodore Shufeldt was an officer of wide experience not only in the regular naval establishment, but in the merchant marine and consular service. He had served on the European station, and while abroad had studied naval development. Upon his return to the United States he had been appointed chief of the Bureau of Equipment and Recruiting in the Navy Department, in which position he had acquired valuable information as to the needs of the naval service. Chief Engineer Henderson had had thirty years' experience with the machinery of the wooden and iron men-of-war of the navy. Commander Howell was a recognized torpedo expert. Lieutenant Very, an ordnance officer of known ability, was the only member of the First Naval Advisory Board selected for service on the Second Naval Advisory Board. Naval Constructor Fernald was one of the leading officers of his corps. Mr. Steers and Mr. Coryell had both achieved high reputation in their respective professions. Mr. Bowles, whom I was to have the pleasure of recommending for appointment in 1901 as Chief Constructor, which position he now holds, had recently returned from Europe, where he had




Photograph by Prince

REAR-ADMIRAL FRANCIS TIFFANY BOWLES

Secretary of the Second Naval Advisory Board, recently Chief Constructor of the Navy

undergone a course of instruction at the Royal Naval College. His modern education and the information he had obtained were of great service to the board during its preparation of the plans and specifications of the new ships.

The Chicago, Atlanta, Boston, and Dolphin were the first ships of the New Navy. That they might embody the latest inventions, Congress directed that before contracts were placed for their construction "the Secretary of the Navy shall, by proper public advertisement and notice, invite all engineers and mechanics of established reputation and all reputable manufacturers of vessels, steam-engines, boilers, and ordnance having or controlling regular establishments and being engaged in the business, all officers of the navy, and especially all naval constructors, steam engineers, and ordnance officers of the navy having plans, models, or designs of any vessels of the classes hereby authorized or of any part thereof, within any given period, not less than sixty days, to submit the same to said board." There was decided public interest in the competition, but, either because the time was too limited or because no compensation accompanied success, not a complete set of designs was submitted. Many plans of sections of a war-ship and of guns with which to arm the vessels were



received, and a number of models were brought to the notice of the board. Examination of the responses made failed to show any designs of a novel character worthy of adoption. The department then turned to the shipbuilders of the country for suggestions.


In the mean time, the Naval Advisory Board had been at work upon the important problems given it to solve. The question arose as to whether single or twin screws should be adopted for the ships. The first vote showed the board unanimously in favor of the single screw. Before announcing the result, Commodore Shufeldt invited the youthful secretary, who had no vote, to state his views.

"I am sorry I cannot agree with the judgment of the board," Mr. Bowles responded. "I believe twin screws are better, and if I am given the time I think I can demonstrate it."

Without consulting his colleagues, Commodore Shufeldt adjourned the board, and young Bowles set to work to gather information and prepare as strong an argument for twin screws as he could frame. That argument carried conviction with it, for the board decided to provide the largest vessel — the Chicago — with twin screws. Single screws were retained for the other ships. The machinery of the Chicago also differed

from the recognized naval practice, and seemed to be a reversion to the style used in the celebrated Stevens battery of thirty years earlier date. The plan was prepared by Mr. Coryell, and it was said by a member of the board that it was adopted because of the unwillingness of the naval members to become involved in a dispute with the civilian experts, and in the belief that development in machinery before the authorization of additional ships would convince the country of the inadvisability of repeating the Chicago experiment. The machinery of the Boston, Atlanta, and Dolphin was merely a duplication of that which had been installed in wooden vessels of latest construction.

Discussion of the method of propulsion of the ships involved consideration of the question of the sail area that should be supplied to them. Great difference of opinion existed on this point. The act of 1882 required that the vessels authorized thereby should have "full sail power and full steam power." The act of 1883 provided that the ships should be constructed "as recommended by the Advisory Board." The board recommended that they be equipped with only two thirds sail power. This recommendation provoked a storm of criticism. Mr. Steers thus described the conflicting views entertained in the service: —



“A number of naval officers asked me, ‘Why do you not give the ships more sail power?’ Said I, ‘Very well; we will give it. But what do you give up for it? Sixty tons! You get rid of sixty tons of coal and you take that sixty tons weight and put it on the spars.’ A naval officer said to me, ‘Steers, why do you not put on more sail? Why do you not have a larger sail power?’ I told him why. I left him, and another naval officer of equal standing the very next moment said to me, ‘Steers, why do you put so much sail on these boats; why do you not cut it down?’”

The reconstruction of the navy demanded the harmonious coöperation of all the officers of the service. Instead, a disposition was manifested to place obstacles in the way. The constructing bureaus of the department adopted an attitude of antagonism toward the Advisory Board, and this antagonism went to the extent of open condemnation of the designs after their adoption and work on the ships had begun. Chief Constructor Theodore Wilson said the Chicago could, under favorable conditions, make the sea speed of fourteen knots required by her contract, “if her engines develop 5000 horse-power and her screws are properly designed. There is a very grave question how long she will keep it up, from the fact that, not being sheathed with wood and

copper, she will foul very quickly and her speed will be reduced." Mr. Wilson predicted that as sea-going vessels the Atlanta and Boston "will practically be failures."

In spite of doubt and disagreement and the virulent criticism made of the plans prepared under the supervision of the board, William E. Chandler, the then Secretary of the Navy, adopted the recommendations of Commodore Shufeldt and his associates, and called for bids for the construction of the projected ships. The Chicago was designed to have a displacement of 4500 tons, a sea speed of 14 knots, and an armament of four 8-inch, eight 6-inch, and two 5-inch breech-loading rifles. The Atlanta and Boston were each to displace 3000 tons, to have an average sea speed of 13 knots, and be armed with two 8-inch and six 6-inch guns. The Dolphin was to be of 1500 tons, 15 knots speed, and to carry one 6-inch gun. Secondary batteries of small guns were to be supplied to all the vessels. That Secretary Chandler was firmly of the belief that the designs would produce splendid ships is shown by the following extract taken from his annual report for 1884:—

They represent three main types of unarmored war-ships now universally considered as indispensable components of any fleet suitable for general national service

upon the high seas. The Chicago is an example of the largest and best unarmored cruising and fighting vessel now built, and will have no superior in the world in the combination of speed, endurance, and armament. In the Boston and Atlanta speed and endurance have been given full development, while their fighting power has been notably increased by placing the battery in a central superstructure on the spar deck and adopting a brig rig, thereby leaving the extremities clear and unobstructed for fore and aft fire. In the Dolphin an important auxiliary in naval operations will be obtained, and she is expected to furnish an excellent model from which may be expanded a high-speed commerce-destroyer, instead of taking as a standard either the overgrown merchant-line steamers or the large and expensive dispatch-vessels which have been built abroad, of questionable utility in time of peace.

The bids for the new vessels were opened on July 2, 1883. Eight firms participated in the competition. The proposal of John Roach, whose shipyard was at Chester, Penn., was the lowest, and it was accepted. To the gratification of the department, the contract cost of the four vessels, excluding masts, spars, rigging, and boats, was only \$2,440,000. This was \$774,100 less than the estimates of the Advisory Board. Now that the contracts had been awarded, the pessimists reiterated the statement that it would be impossible to carry out the provision of the law requiring that the vessels should be built of "steel of domestic manufacture, having as near as may be

a tensile strength of not less than 60,000 pounds to the square inch and a ductility in 8 inches of not less than 25 per centum." To insure compliance with this law the Advisory Board prepared a set of strict regulations governing the acceptance tests of steel supplied to the navy. The high standard then fixed is largely responsible for the excellent reputation early gained by this product of American resources and skill and for the phenomenal growth which the industry has attained, so that again the navy is to be credited with one of the greatest industrial advances of our time. Before the construction of the *Chicago* and other vessels of her day began, steel was held at 8½ cents per pound; it immediately dropped to 4½ cents; and this reduction, as well as its speedily recognized merits, brought about its use for the many purposes for which it is now employed.

The criticism which had torn the rotting hulls from the live-oak frames of the old navy, and had discovered flaws in the designs of the new vessels, suggested grave defects in the new ships as their construction progressed. Inadequate sail power, slow speed, the doubtful value of the machinery of the *Chicago*, the absence of sheathing, and the peculiar shape of the *Atlanta* and *Boston*, were the subjects of never-ending comments

by critics of the navy. The Dolphin was denominated merely a pleasure boat without offensive or defensive power. Criticism waxed louder when the Dolphin, on her official trial, failed to attain the horse-power required by her contract, and structural defects were asserted by the trial board. William C. Whitney, Secretary of the Navy in Cleveland's administration, 1885-89, declined at first to accept the Dolphin, but ultimately did so. The little vessel was subjected to a series of severe trials; but, in the course of a cruise she was directed to make, she made 58,000 miles, and was under steam 9000 hours. In that entire period she was compelled to stop but once for repairs, which were completed in two hours. The unfortunate financial failure of John Roach in 1885 forced the government to take over and complete the Atlanta, Boston, and Chicago, and it was not until 1886 that the Atlanta was commissioned, and 1887 that the Boston and Chicago entered active service. When the designs for these vessels were in course of preparation, there were but eight 16-knot vessels in existence. The highest speed for one hour attained by the Chicago was 16.35 knots; the Boston, 16.33 knots; and the Atlanta, 16 knots. For ships of their date and class they are to-day efficient vessels. These three ships, with the




Photograph by C. M. Bell

HON. WILLIAM C. WHITNEY

Secretary of the Navy 1886-1889

Yorktown of later date, formed the famous White Squadron, which twelve years ago visited Europe and gave the maritime nations of that continent visual knowledge of the possession by the United States of modern men-of-war. The war with Spain taught Europe that the navy those ships represented was able to destroy the war-vessels which her own yards had built.

While criticism raged Congress halted in the reconstruction of the new navy. Additional ships were not authorized until the session of 1884-85, which authorized the building of two cruisers, subsequently christened the Newark and Charleston, and two gunboats named the Yorktown and Petrel. The Charleston was built upon designs purchased in England. The drawings for her engine and boilers were a combination of features of the machinery of several foreign cruisers. Their lack of proportion and agreement necessitated many expensive changes. The Charleston was further criticised because she was provided with compound engines, when the naval practice, at the date of her construction, had changed to triple expansion, an advantage which will be appreciated when it is understood that the new type made possible a considerable increase in speed. Like her predecessors, however, the Charleston



performed efficient service during her short life. Her first notable achievement was the capture of the steamer *Itata*. The *Itata*, which had been seized by the United States Marshal at San Diego, Cal., on suspicion of filibustering in connection with the Chilian revolution of 1891, escaped from his custody. Vindication of the majesty of American neutrality required her recapture. President Harrison directed that the *Charleston* be sent to overhaul her. Under war conditions the cruiser speeded after the chase. Before the object of the voyage was accomplished, she had steamed to Iquique, Chili, a distance of more than six thousand miles. On her way to Manila, during the war with Spain, the *Charleston* entered the harbor of Agaña, Guam, and demanded the surrender of the island. The Spanish governor and the inhabitants were unaware that the mother country was at war with the United States, but the frowning guns of the man-of-war convinced them of the fact, and surrender followed. The *Charleston's* career was brought to a tragic close. While cruising off the north coast of Luzon in 1900, she ran on an uncharted reef and sank. Her officers and men, fortunately, succeeded in leaving the ship before she disappeared. A new *Charleston*, practically an armored cruiser and embodying the latest

developments in naval science, was contracted for in 1901, and her characteristics give promise of a vessel which will make a formidable enemy in time of war, and an effective guardian of American interests in time of peace.


Almost two years elapsed before the actual construction of the Charleston, Newark, Yorktown, and Petrel began. On August 3, 1886, President Cleveland approved a Naval Appropriation Act which must be regarded as historic, not only on account of the additional strength it gave to the naval arm of the government, but because among the number authorized was the ship the destruction of which was the culminating incident in the chain of events which led to the war with Spain. The act directed the building of the Texas, a second-class battle-ship, the Maine, an armored cruiser, the Baltimore, a protected cruiser, the Vesuvius, a dynamite cruiser, and the Cushing, a torpedo-boat.

Thus, new types of men-of-war were introduced into the navy. The Texas and Maine were the first modern armored cruising ships constructed by the United States. The necessity for their addition to the navy had been demonstrated by the battle between the French and Chinese fleets in August, 1884, at the Pagoda Anchorage, Min River, when the ships flying

the dragon flag were sunk in half an hour. This disaster opened the eyes of the world to the terribly destructive effect of modern ordnance. Prior to the reconstruction of the New Navy the torpedo had been regarded as an important means of defense, and the reliance placed upon it was a potent cause for the delay in building modern ships. A great ironclad fleet organized by France during her war with Prussia was ordered to annihilate the Prussian navy, and, if necessary to bring on an engagement, to force the harbor in which the enemy might have sought refuge. In attempting to enter a port the leading French ship was injured by a torpedo, and the fleet returned to its native land and took no further part in the struggle. During her war with Turkey, Russia planted torpedoes in the Danube, and, though provided with a formidable fleet of ironclads, Hobart Pasha, the gallant Turkish commander, was unable to force the river.

These incidents, as well as our own experience in the Civil War, gave a value to the torpedo as an implement of war which greatly impressed the maritime nations. Europe rapidly supplied herself with large flotillas of torpedo-craft having high speed and armed with torpedoes of the latest type. The first fast torpedo-boat ever built

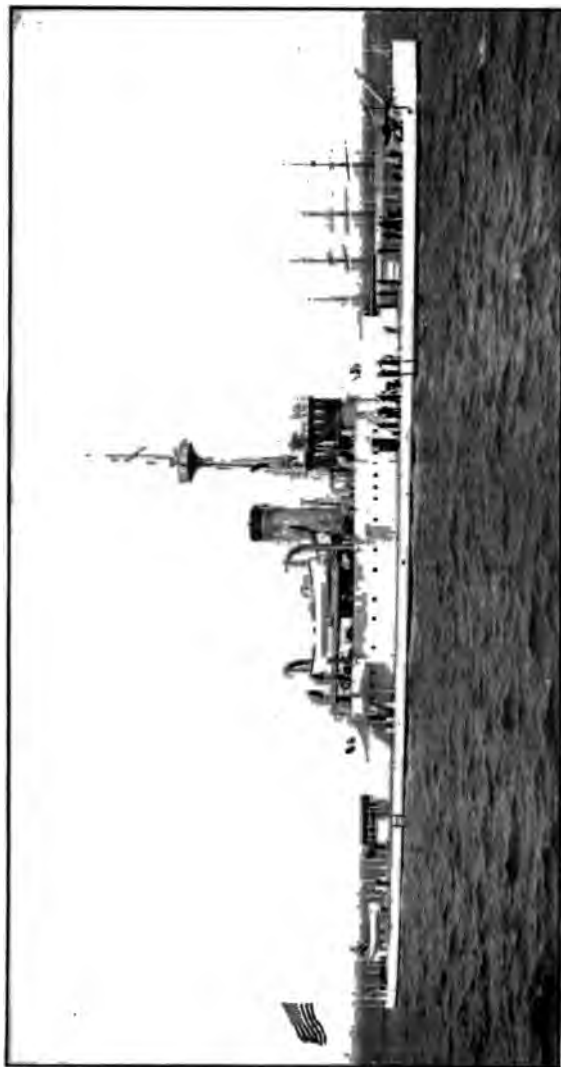
was constructed by Thornycroft, of England, for the Norwegian government, and by the time our Dolphin was completed, European navies were vying with each other to obtain the largest and most efficient number of these craft. The Cushing was the pioneer of the American steel torpedo-boat flotilla. She also enjoys the distinction of having been the first vessel of the United States navy to be provided with quadruple expansion engines. Impetus was given to the construction of torpedo-craft by the sinking of the Chilian ironclad Blanco Encalada by the torpedo-gunboats Almirante Condell and Almirante Lynch during the Chilian Revolution of 1891. Impressed by this achievement, Congress immediately authorized a torpedo cruiser of seven hundred and fifty tons, but it was never built. Since the Cushing was laid down, the United States has constructed or is building sixteen torpedo-boat destroyers, thirty-five torpedo-boats, and eight submarine boats. The value of the submarine boat has yet to be shown. While still in the experimental stage, boats of this type have been built in the United States and Europe which indicate the possession of possibilities which progressive naval powers cannot afford to overlook. The Vesuvius was one of the experimental vessels built for the United States navy. The act



authorizing her construction details her characteristics: "Said cruiser to be not less than two hundred and thirty feet long, twenty-six feet beam, seven and one half feet draught, three thousand two hundred horse-power, and guaranteed to attain a speed of twenty knots an hour, and to be equipped with three pneumatic dynamite guns of ten and one half inch caliber, and guaranteed to throw shells containing two hundred pounds of dynamite or other high explosives at least one mile, each gun to be capable of being discharged once in two minutes, at a price not exceeding three hundred and fifty thousand dollars."

The *Vesuvius* exceeded the horse-power and speed required by the law, but the superior range of high-power guns and her vulnerability impaired her value for offensive purposes. During the war with Spain, she was ordered to Santiago de Cuba, where, under the protection of the guns of the North Atlantic fleet, she threw dynamite shells into the harbor. The effect produced was materially unimportant though morally great. This experience confirmed the view that the ship was of limited usefulness, and she is now in ordinary, awaiting transformation into a torpedo-boat or other disposition.

Like the *Charleston*, the *Texas* and *Baltimore*




Photograph copyright 1880 by E. Muller

COAST-DEFENSE MONITOR AMPHITRITE

were built in accordance with designs purchased abroad. These three ships are the only vessels of the navy of any account, with the exception of the Albany, New Orleans, and Topeka, purchased during the war with Spain, which are the product of foreign thought. The cruisers Philadelphia and San Francisco, authorized in 1887, the Olympia, Cincinnati, Raleigh, Detroit, Marblehead, and Montgomery, provided for in the act of 1888, and the triple-screw Columbia, popularly named the "Gem of the Ocean," and her sister ship, the Minneapolis, as well as the gunboats authorized by the same acts, were all designed by Americans and built of American material — characteristics of every vessel authorized simultaneously with or after them.

The necessity of armored ships was appreciated by the first Naval Advisory Board, which, though failing to recommend the authorization of any ironclads, specifically reported that "such vessels are absolutely needed for the defense of the country in time of war." By express direction of Congress, the second Naval Advisory Board investigated the question of completing the monitors Puritan, Amphitrite, Monadnock, Miantonomoh, and Terror, laid down in the closing years of President Grant's administration. The board reported that when completed the



vessels would be efficient. Congress appropriated \$1,000,000 for their engines and machinery, but subsequently directed that work cease on these vessels, and it was not until ten years had passed that the last of them was ready for service. Five additional monitors have been authorized — the Monterey, which was built at San Francisco and commissioned in 1893, and the Arkansas, Connecticut, Florida, and Wyoming, which were ordered in the first days of the struggle with Spain and before experience in war had thoroughly demonstrated the unsuitability of this type of ships for offensive work. Naval opinion to-day is decidedly opposed to the construction of additional monitors. The monitor was the product of peculiar conditions, and its day is past, just as the frigate was made obsolete by the development of the steam engine and the gun.

The question of armor has been one of the most troublesome with which the navy has had to deal, and it was with a feeling of sincere gratification that the department was able to effect its settlement in 1901. There was, of course, no steel armor plant in the United States when the construction of the New Navy was begun. Secretary Chandler was compelled to place contracts in England for compound armor for the turrets




CASTING ARMOR-PLATE

The tapping of the furnace



of the Miantonomoh, and in his annual report for 1883 he suggested that, in view of the large amount of this material which the monitors would need, it was desirable that Congress should take action which would encourage American manufacturers to embark in the industry. When he assumed office, Secretary Whitney decided not to award contracts to foreign firms, but to bring about the creation of armor and gun steel plants in the United States. By permitting the wants of the navy in armor and steel to accumulate, Mr. Whitney was able to negotiate for the manufacture of a quantity large enough to induce the Bethlehem Iron Company to establish a plant for the manufacture of this material. Congress cordially seconded Mr. Whitney's efforts, and appropriated \$4,000,000 to facilitate success. Mr. Whitney declared that the establishment of this plant "must be deemed to have been the first important step towards the creation of a navy modern in character." Mr. Whitney deserves high praise for the policy he adopted, but he acknowledges that the credit for the achievement belongs in part to the Gun Foundry Board, organized by Secretary Chandler, to the Board of Ordnance and Fortifications, the president of which was Secretary of War Endicott, and to special committees of the Senate and House of



Representatives, which had conducted exhaustive investigations into the subject of gun and armor manufacture. The Bethlehem Iron Company agreed to begin the deliveries of armor in 1889, but its failure to do so, added to the prospect of indefinite delay in the completion of ships under construction, caused Benjamin F. Tracy, Secretary of the Navy in Harrison's administration, to award a contract for six thousand tons of armor to Messrs. Carnegie, Phipps & Company, the largest steel manufacturers in the United States, with the understanding that they should immediately establish a plant. Secretary Whitney was also responsible for the establishment in this country of the first plant for the manufacture of small guns. As a condition of a contract for guns for the secondary batteries of war-ships, he required the Hotchkiss Company to set up a factory in this country. The same company also acquired the right to manufacture a torpedo, the invention of Captain J. A. Howell of the navy, which was used to some extent by the service.

The development of armor within the last twenty years is one of the marvels of naval science. Compound armor, composed of a wrought-iron plate with a hard-steel face one third as thick welded to it, was succeeded by solid steel. Solid steel was displaced by nickel steel, nickel steel by




HON. H. A. HERBERT

Secretary of the Navy 1893-1897



Harveyized armor, and recently the last named, partially, by Krupp armor, the highest development yet reached. Very high prices demanded by the armor manufacturers led Congress, during the administration of Secretary Herbert, to make an exhaustive inquiry. Mr. Herbert conducted an independent and very thorough investigation. When as his successor I entered the Navy Department in 1897, Congress had limited the price of armor to an average of \$300 per ton. Three battle-ships then building had reached a stage of construction where armor was needed if the work were to continue. The Carnegie and Bethlehem companies, the only two firms in the country provided with the requisite plants, were invited to submit bids, but they declined to do so on the ground that they were unable to manufacture armor at the price fixed by Congress. The act limiting the price required the Secretary to appoint a board to prepare plans and estimates for an armor plant. This direction was obeyed, and at the next session of Congress a report was submitted which fixed the cost of a factory at \$4,000,000. While the government could, of course, manufacture armor, it seemed to me unwise for the United States to embark in an industry which was properly the field of individual operation, and, furthermore, the cost of the



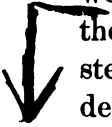
material turned out under governmental conditions was certain to be higher than that turned out by private manufacturers. Congress was induced to increase the limit of cost to \$400, and then contracts for Harveyized armor were placed with the Carnegie and Bethlehem companies. By the act of March 3, 1899, the limit of cost was again fixed at \$300. Believing that a large quantity might attract bidders, the armor for thirteen vessels, amounting to 24,950 tons, was grouped and proposals were advertised for. Believing, too, that none but the best materials should be used for American ships, I approved specifications which called for armor of a quality equal to that manufactured by the Krupp process. Notwithstanding the value of the contract and the fact that the time for deliveries under it had been extended over a considerable period of time, the lowest bid received fixed the price per ton at a sum largely in excess of that named by Congress. A further objection to the acceptance of this bid was the fact that the company submitting it had no plant and could not begin deliveries before January, 1904. Congress finally determined to intrust the Secretary of the Navy with the matter of arranging for the purchase on fair terms, and, notwithstanding the apprehension of some members, inserted this

provision in the Naval Appropriation Act, approved June 7, 1900: —

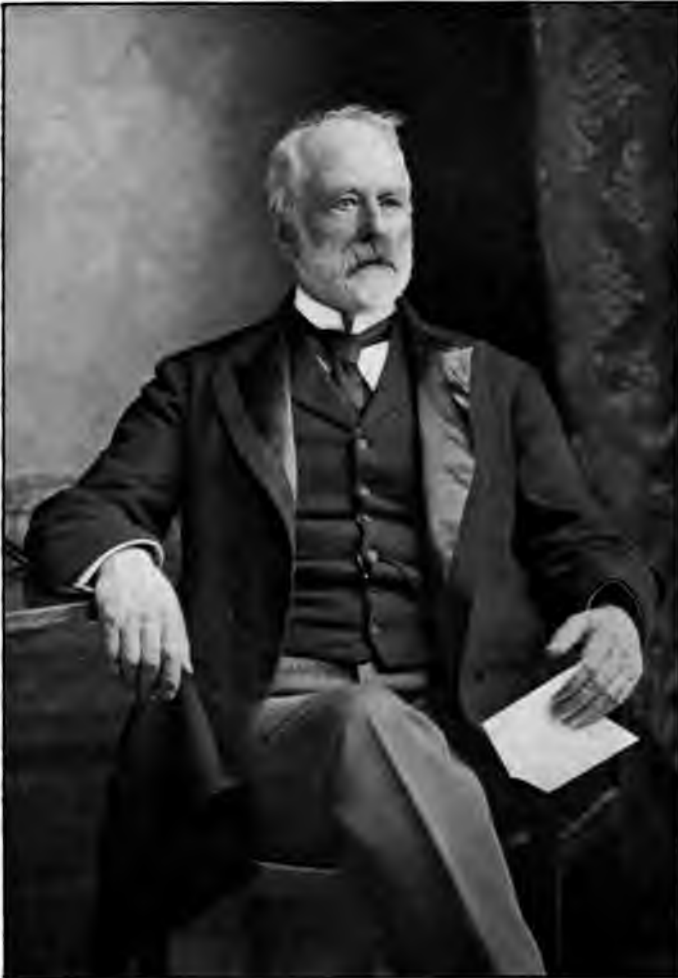
Provided, that the Secretary of the Navy is hereby authorized to procure by contract armor of the best quality for any or all vessels above referred to, provided such contracts can be made at a price which in his judgment is reasonable and equitable; but in case he is unable to make contracts for armor under the above conditions, he is hereby authorized and directed to procure a site for and to erect thereon a factory for the manufacture of armor, and the sum of four million dollars is hereby appropriated toward the erection of said factory.

This was a generous confidence in me, and the work of reaching an equitable agreement with the armor manufacturers began at once, failing which the intention was to carry out the instruction of Congress with respect to the establishment of an armor plant. Though it had been intimated that the armor makers would demand \$545 for every ton of Krupp armor furnished, the negotiations, which were conducted through Rear-Admiral Charles O'Neil, the accomplished Chief of Ordnance, to whom great credit is due, led to a willingness on their part to meet the government more than halfway. The new construction since the declaration of war against Spain included, besides the monitors and smaller craft, eight battle-ships, six armored cruisers, and nine protected cruisers. These ships required a total

of 37,000 tons of armor. Such a large quantity enabled the department to make highly advantageous terms both in respect of quality and price. The highest price ever paid for armor by the United States was \$725 per ton for the sponsons of the Iowa and Brooklyn. Including royalty, the United States agreed to pay \$456 for Krupp armor, and \$411.20 for Harveyized armor. A few months ago the armor manufacturers advised the Navy Department that the royalty paid by them upon the Krupp process had been reduced ten shillings per ton, and that the price of armor will be less by that amount to the United States. It is safe to say that never have we obtained such excellent protection for our ships at so small a cost.




While armor was attaining wonderfully resistive quality combined with comparatively little weight, which is the important characteristic of the Krupp process, the power of the gun was steadily increasing and the projectile and powder were keeping pace. With the same pressures, the guns of to-day produce almost twice the velocities of those of 1882, fire with much greater rapidity, and have penetration and range which would not be possible with weapons of the old type. In 1882 experiments were conducted with steel projectiles. To-day steel pro-




HON. BENJAMIN F. TRACY

Secretary of the Navy 1889-1893

jectiles, fitted with soft steel caps and given sufficient velocity, can without difficulty perforate Krupp armor of a thickness much greater than their own caliber. Smokeless powder was introduced into the navy during the war with Spain. 

The history of the armor fleet of the United States furnishes one of the most interesting chapters of the New Navy. Following the authorization of the Texas and Maine, Congress directed, in 1888, the construction of the armored cruiser New York. Four years later, the armored cruiser Brooklyn was authorized. In his first annual report, dated November 30, 1889, Secretary Tracy stated that the "necessities of our vulnerable position demand the immediate creation of two fleets of battle-ships, of which eight should be assigned to the Pacific and twelve to the Atlantic and Gulf coasts." Mr. Tracy was far in advance of the country. Congress did, however, agree to the construction of first-class battle-ships, and by the act of June 30, 1890, authorized the construction of "three seagoing coast-line battle-ships," which were christened the Indiana, Massachusetts, and Oregon. Two years later the Iowa was authorized. These four vessels and the Texas constituted our battle-ship force during the war with



Spain. The Kearsarge and Kentucky, equipped with superposed turrets, were constructed in accordance with the provisions of the Naval Appropriation Act approved in 1895. The authorization of the Illinois, Alabama, and Wisconsin followed in 1896; that of the Ohio, Missouri, and second Maine, in 1898; afterwards that of the Georgia, Nebraska, New Jersey, Virginia, and Rhode Island, and then that of the Connecticut and Louisiana. The war with Spain taught afresh the value of sea power, and, besides battle-ships, Congress has since then authorized the construction of eight armored cruisers—the California, Pennsylvania, West Virginia, Maryland, Colorado, South Dakota, Washington, and Tennessee—and three protected cruisers, which are practically armored cruisers—the St. Louis, Milwaukee, and second Charleston. There are sixty-five war-ships under construction.

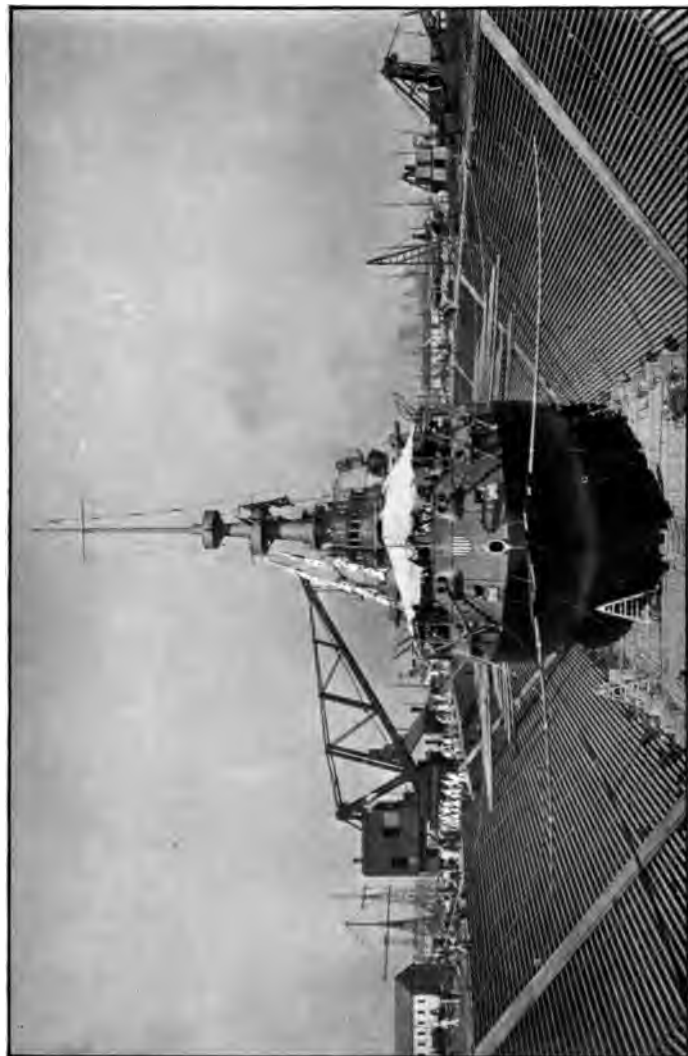
The New Navy comprises to-day one hundred and seventy-two steel ships, nineteen of which are battle-ships of the first and one a battle-ship of the second class; ten armored cruisers; one armored ram; ten monitors (iron and steel); twenty-six protected and unprotected cruisers; forty-six gunboats, and fifty-nine torpedo-craft. The cost of these ships approximates \$275,000,000 — a

small part of the wealth of our country. With the exception of a few million dollars, all this money has been expended in the United States. The money disbursed for the creation of the New Navy has thus been distributed among our own citizens.

The navy-yards, which in 1883 were, to say the least, in a highly inefficient condition, are to-day well equipped with modern tools and appliances, and capable of making any repairs that a modern ship may require. The New York yard is undergoing equipment for building a battle-ship, but there is much yet to be done before it and other yards will be up to the standard of excellence which the country demands of its implements. The navy-yards twenty years ago employed less than five thousand men, nearly every one of whom had gained place by means of political influence, and was dependent upon political influence for continuance on the government pay-rolls. The spoils system was checked by Secretary Tracy, who courageously initiated reforms, and Secretary Herbert firmly continued this policy. There are to-day more than fifteen thousand navy-yard employees, all under civil service rules with respect to appointment and promotion, not one of whom is removable except in consequence of

his own fault. During the five years of my naval administration there was no violation of the rules governing the employment of labor at the yards. This covers not only appointments but promotions, which, under regulations then placed in force, were made in accordance with the efficiency records. Just before the expiration of my term even the shipkeepers were put under the labor rules, and with this act the last relic of the spoils system came to an end. It was almost a pity to part with it as a reminder and "terrible example" of the old spectacle of the carcass and the vulture.

The fear which existed before contracts were awarded for the Chicago, Boston, Atlanta, and Dolphin, that only a few firms would enjoy the benefit of war-ship construction, has disappeared. Thirteen shipbuilding firms are to-day constructing men-of-war. There is not an industry in the land which fails to receive direct or indirect profit from the enlargement of the navy. Even the cornstalks which the farmer supplies to the manufacturer are used in the making of the backing of the armor of war-ships. More than a hundred trades assist in the building of a man-of-war. Among them are the iron and steel industry, the coal industry, the oil industry, the brass industry, the copper




Photograph by E. Muller

BATTLE-SHIP OREGON IN DRY DOCK

industry, the aluminum industry, the electrical industry — indeed, I might continue through the list of industries of the United States and find few that fail to contribute in some way to the construction or operation of the ships of our New Navy.

There is another feature in connection with the development of our navy which should not be lost sight of, and which has a material and educational side. The increase in the construction of naval ships has led directly to an increase in the construction of ships in the merchant marine. The great shipyards at San Francisco, Newport News, Cramps', Bath, Maine; and more recently at Quincy, Mass., owe their creation to getting naval work to do, and thereby have been put in position now to do even larger amounts of merchant marine work. Indeed, one of the complaints now made against shipbuilders for delay in completing naval vessels is of inclining to neglect these for non-governmental work.

Educationally, too, few people have any idea what a stimulus the increase in our navy has been in all that line of technical, designing, engineering, and mechanical training which is one of the many features of our technical schools, now so rapidly increasing all over the



country both in number and scope. The collateral influence upon industrial arts of the creation of the navy, apart from its direct influence upon shipbuilding facilities themselves in the United States, is much greater than is generally known. The necessity for building naval vessels of great strength, combined with the least possible weight, has made it essential to produce the very best quality of structural steel. The high standard set by the Navy Department in the very beginning of the New Navy forced upon our steel manufacturers the early development of an art which has since become one of the controlling factors in the industry of the country. This was publicly recognized by the president of the United States Steel Corporation when he recently said that the standard set by navy officers for structural steel had practically produced and made necessary this important art in the United States. The construction of vessels, with the machining of ship plates, armor plates, heavy shafting, etc., has made it necessary to produce in this country machines for dealing with these classes of work. The genius of the American people devoted to these subjects has produced machines surpassing those in use abroad for similar purposes. The minor developments in this line are multitudinous, and

have led to a very considerable export of similar classes of machinery to foreign countries.

The rivalry among the designers of naval vessels, the production of the most efficient armor plate, the most powerful ordnance, the most efficient powder, the fact that a naval vessel is not only a vast engine of great complication, involving all the building arts, but that it is a home for very large crews, also develops and sets a standard for all domestic articles required for use in the navy—clothing, food, supplies, and furnishings of all kinds. The standard set for all these tends to the promotion and improvement of our national products at large.

These are some of the lines along which the development of our navy tends toward the educational and industrial advance of the whole country. They all necessitate and encourage the industrial training of our people, and are in line with that education which is now recognized as the most important education—the education of the hand and the brain in the useful arts of life.

III

THE ORGANIZATION AND EDUCATION OF THE NAVY

THE effectiveness of a navy depends vitally upon the efficiency of its personnel. Provided with war-ships of latest construction, a service made up of officers and men inadequately trained and lacking spirit is halfway toward defeat. Composed of inferior vessels, manned by experienced and resourceful officers and men, a fleet may wrest victory from a physically stronger enemy.

The history of the United States and that of Spain, foes in 1898, furnish many instances of valor and intelligence overcoming numerical and material superiority. Philip of Spain saw his Invincible Armada harried and finally scattered by the smaller command of Howard and Drake. Three hundred and ten years later, a queen holding in trust the scepter Philip once wielded, sent to annihilation a squadron of war-ships as modern in construction and armament as were in their day the wooden vessels dispatched by the



Drawn by Henry Reuterdehl

THE TRAINING-SHIP HARTFORD

Weathering a gale in the North Sea

earlier monarch to subjugate England. The force of 1588 sustained reverse because it was deficient in sailors; that of 1898 suffered total destruction because it lacked engineers.

No such disasters as befell the navy of Spain have yet clouded the navy of the United States. The cycle from our Revolution to the Spanish-American war is bright with shining deeds, the fruit of the gallantry and skill of the men who did them. What can be more inspiring than the intrepidity of John Paul Jones as he stands on the deck of the shot-torn and sinking *Bon Homme Richard*, shouting orders to his men, who are working like demons at such guns as are yet unmounted by the enemy's fire? Above the noise of booming cannon and the sharp rattle of musketry and the hoarse cries of infuriated crews he hears the hail from the smoke-hidden *Serapis*:

"Has your ship struck?"

And then the laconic reply:—

"I have not yet begun to fight!"

It was not a question of that courage which is so common, but of that nerve which endures to the end and without which the ordinarily brave man flinches from the ultimate test and responsibility.

Outside of Boston Harbor the unlucky Chesapeake, manned by a green and heterogeneous

crew, is wildly firing at the well-disciplined British frigate Shannon. Lawrence is struck and is borne below.

"Don't give up the ship!" he cries. "Tell the officers to fight to the last. Never strike the colors. They shall wave while I live."

The nation is rent by civil war. Under a rain of shot and shell, a Union fleet steams into Mobile Bay. The first ship, the Brooklyn, falters.

"What's the trouble?" is shouted from the flagship, the Hartford.

"Torpedoes!" is the explanation, trumpeted in reply.


"Damn the torpedoes!" exclaims Farragut. "Four bells. Captain Drayton, go ahead. Jouett, full speed."

The dawn glows on the Bay of Manila on the first of May, 1898. An American squadron, which it reveals, steams straight for a Spanish force lying under the batteries of Cavite. Soon shell are hurtling toward it, but, falling short, expend their energy in the water. When the proper range is reached, Dewey turns and quietly remarks: —

"You may fire when you're ready, Gridley."

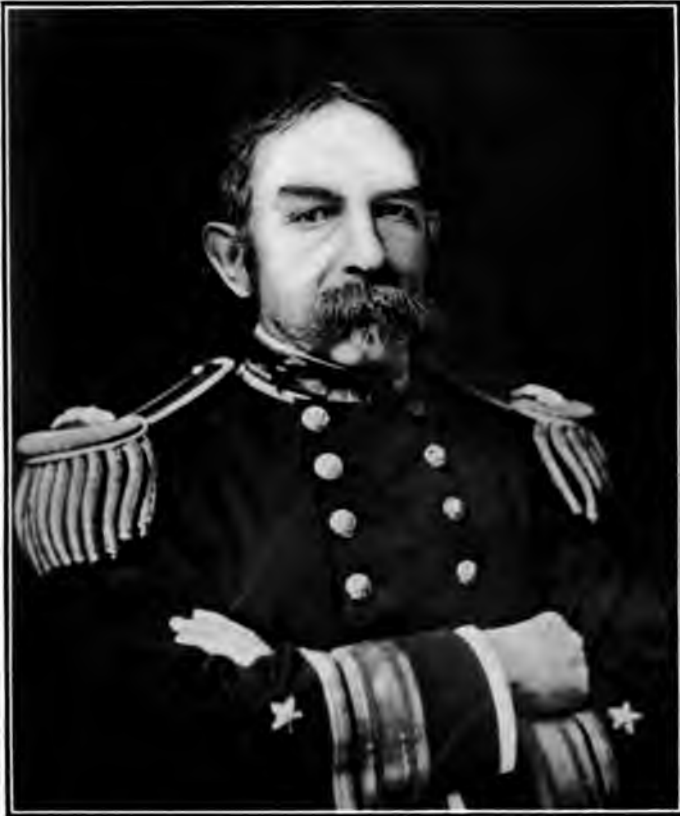
Courage has been always a characteristic of the American sailor, but it alone was not respon-

sible for victories achieved by our men-of-war over those of enemies no less brave. In the days of the sailing ship the superiority was due, in an important degree, to the greater skill with which the ship was handled by experienced officers and its crew of hardy longshoremen. Hull won as much distinction in sailing the Constitution as in fighting her. The native intelligence, the quick eye, and the supple limbs of the men, born and bred in the salt air of the Atlantic coast, easily worked the simple guns of that day. Raw material is not so easily convertible into the experienced man-o'-war's-man of the twentieth century. The abandonment of sails and the substitution of steam and electricity, with the countless improvements accompanying the change, have created in the war-ship of the New Navy a demand for a mechanic-sailor—that is, a man trained in the operation and repair of fighting machinery, yet impregnated with the salt of the sea. Ability to navigate and sail a ship was the first requisite of an officer and a seaman of the Old Navy; to-day they are engineers and mechanics first, and sailors afterwards. A modern battle-ship from stem to stern is simply a huge fighting machine. It is propelled by machinery; its turrets, themselves machines, are operated by machinery; the guns are loaded and



fired by machinery; the torpedoes, complicated engines, are sent on their careers of destruction by machinery; small boats and anchors are lowered and hoisted by machinery, and watertight compartments are opened and closed by machinery.

Steam and electricity are the powers which move this terrible creature of man's destructive genius; and steam and electrical engineers are required to guide and supervise its operation. An officer's duties are not, however, limited to the practical application of these sciences. He must also know how to navigate his ship and be able to care for the health and general well-being of the men under his command. Occasions arise when he must conduct negotiations for the settlement of important diplomatic questions, and he frequently represents the government at functions of international consequence. He rescues the shipwrecked, gives assistance to the national merchant marine, and, if called on, quells its mutinies. He surveys dangerous coasts, makes deep-sea soundings for the triple purpose of finding a suitable bed for a projected cable, charting the bottom of the ocean, and promoting ichthyology. He determines for navigators the longitude and latitude of doubtful points. He should have at least a rudimentary acquaintance



Photograph by Gessford


REAR-ADMIRAL ARENT SCHUYLER CROWNINSHIELD

Chief of the Bureau of Navigation and a Member of the Naval War Board during the war

with astronomy, and understand something of chemistry and metallurgy. Because legal questions are sometimes raised by or referred to him, and because he serves on courts-martial and administers punishments, he ought to be familiar with the principles of common law. Above all, he must be a man of quick decision, of nerve, and of sound judgment, for, as commanding officer of a battle-ship or even a vessel of inferior class, he should know in battle when to strike and strike sure; in peace, how to determine an important question affecting the honor of the nation which is brought to him for immediate settlement.

I have described the attainments of the ideal officer, but it does not follow that every member of the commissioned force of the navy possesses them. At the same time, the preliminary education given at the naval academy and the subsequent training in active professional life insure the development of an officer, provided he can and will improve his opportunities there. It is the proud boast of the American navy that in its existence of more than a century in but few instances has the man been wanting when the occasion for him came.

The personnel of the navy of the United States was created simultaneously with the au-



thorization of the first war-ships of the Old Navy. The act of Congress of March 27, 1794, directed that "there shall be employed on board each of the ships of forty-four guns, one captain, four lieutenants, one lieutenant of marines, one chaplain, one surgeon, and two surgeon's mates; and in each of the ships of thirty-six guns, one captain, three lieutenants, one lieutenant of marines, one surgeon, and one surgeon's mate, who shall be appointed and commissioned in like manner as other officers of the United States." Thus was formed the line, and the marine, medical, and chaplains' corps. The "purser," an enlisted man, was to develop into the paymaster. An experienced shipbuilder was needed to design and construct the first ships, and Joshua Humphreys was appointed a naval constructor and assigned to duty. As the navy grew, additional constructors were required, and the men employed for construction work were eventually given commissions. Taking advantage of a law authorizing the appointment as assistant naval constructors of any cadets who had graduated with distinction in the mechanical department of the naval academy, Cadet Engineer F. T. Bowles, in 1879, applied for an appointment, and also requested permission to attend the Royal Naval College at Greenwich, England, which

had an advanced course in shipbuilding. The older constructors opposed Mr. Bowles's ambition, but grit and persistency gained for the young cadet a victory of the greatest importance to his corps. Only leading graduates of the academy have since been assigned to the construction corps — none from civil life. The professors of mathematics — now an anachronism in the military organization of the navy — were originally teachers on board ship of midshipmen of the Old Navy. They no longer follow the sea, and their duties are civilian. Of the fifteen officers of this corps in November, 1902, eight are on duty as teachers at the naval academy, one is director of the nautical almanac, and the remainder are connected with scientific work of the naval observatory. Congress should provide that no further appointments be made to this corps, as all its work can be procured from civil life, and the anomaly of a pension or retirement for non-military service should be done away with.

Like naval constructors, civil engineers first received appointments from the Secretary of the Navy; and were liable to dismissal or removal at his pleasure. They, too, were at last made a part of the commissioned force. Civil engineers have many and important duties, relating

principally to the planning and construction of naval stations. With the exception of the line and construction corps, appointments in the commissioned branch of the navy are made from civil life. Medical officers are selected at large, after a thorough examination. President McKinley approved my recommendation that appointments of civil engineers, assistant paymasters, and professors of mathematics should be made after competitive examination. In this connection it may be said that it is difficult to see why any of the various staff officers, who as a corps never go to sea and have no military command, should have military rank or title.

The commissioned personnel of the first ships of the Old Navy was formed during the administrations of Presidents Washington and Adams. The midshipmen, who were designed to be the future commodores and captains, were all of tender years when appointed, and, without preparation, were sent on board ships either fitting out or about to sail in search of the enemy. Yet the need of mental education for the youngsters was great, and fitful attempts were made to provide it. Congress having refused to establish a naval school, the Navy Department in 1802 prescribed in regulations the duties of schoolmasters; but schoolmasters were not appointed. When, in



Photograph by O. Johnson

REAR-ADMIRAL CHARLES O'NEIL

Chief of the Bureau of Ordnance during the war

1819, the Navy Department decreed that midshipmen must pass a professional examination in order to receive promotion to the grade of lieutenant, the country greeted the reform with gratification; the youths were affected with consternation. It was the thing for a "middy" during the greater period of his apprenticeship to apply himself to "doing what he was told, and doing it — quick" — a process which was frequently accelerated by a rope's-end — and to devote as much time as he could spare in the six months prior to examination to the study of the theory of seamanship. This theoretical education was obtained from a few books on mathematics and navigation, and sometimes from the kindly help of a superior. In "The United States Naval Academy," written by Mr. Park Benjamin, whose full and excellent history of the naval academy I have followed, the author thus describes the examination of Midshipman Joseph Tatnall:—

Commodore: "Mr. Tatnall, what would be your course, supposing you were off a lee shore, the wind blowing a gale, both anchors and your rudder gone, all your canvas carried away, and your ship scudding rapidly toward the breakers?"

Tatnall: "I cannot conceive, sir, that such a combination of disasters could possibly befall a ship in one voyage."

Commodore: "Tut, tut, young gentleman, we must

have your opinion supposing such a case to have actually occurred."

Tatnall: "Well, sir—sails all carried away, do you say, sir?"

Commodore: "Aye, all—every rag."

Tatnall: "Anchor gone, too, sir?"

Commodore: "Aye, not an uncommon case."

Tatnall: "No rudder, either?"

Commodore: "Aye, rudder unshipped." (Tatnall drops his head despondingly in deep thought.) "Come, sir, come—bear a hand about it. What would you do?"

Tatnall (at last and desperate): "Well, I'd let the infernal tub go to the devil, where she ought to go."

Commodore (joyously): "Right, sir, perfectly right! That will do, sir. The clerk will note that Mr. Tatnall has passed."

A temporary government school for educating midshipmen was organized in 1821. Seventeen years later Secretary Paulding established a preparatory school in the naval asylum, a home for aged seamen, at Philadelphia. To this school boys were sent for instruction for a period of eight months, after which they were ordered to sea. Aside from the fact that it marked an advance in naval training, this school is remembered to-day because it caused the connection with the navy of William Chauvenet, who was appointed professor of mathematics and navigation. When first employed, Professor Chauvenet was only twenty years of age; but he instituted re-

forms, introduced order and system, and extended the scope of studies. Despite the failure of efforts which had been made since the navy was created to obtain authority of law for the establishment of a school for the education of midshipmen, Professor Chauvenet threw himself into the project with all the enthusiasm of youth, and drew up a plan, requiring no legislation and no additional cost, for an institution the curriculum of which included every subject a naval officer of the day required to fit him for his duties. Mr. David Henshaw, Secretary of the Navy in 1844, adopted the scheme, which contemplated a two years' course of instruction, but it did not go into operation because Secretary Mason, Mr. Henshaw's successor, revoked the order. This action was taken upon advice given by older officers of the service, who insisted that the midshipmen were needed on board ships, and that as their future duties were connected with the sea, the sea was the only school in which they should be taught.

Many causes were operating to bring into life the seed which Professor Chauvenet had sown. The introduction of steam, the scandalous conduct of many officers, the lax discipline, brutality, and oppression which existed afloat, and finally the tragedy of the brig Somers, when Midship-

man Spencer, son of the Secretary of War, and two enlisted men were hanged on the charge of plotting mutiny, established the necessity of a method by which reputable boys could be appointed, and receive a moral and mental education which would enable them to conduct themselves with honor and dignity, and reflect credit upon their country and service. Loudly as the press and citizens called for action, Congress did not respond, and it was left to the patriotic and far-seeing George Bancroft, of Massachusetts, the distinguished historian of the United States, to establish the Naval Academy.

Shortly after Mr. Bancroft entered the Navy Department, Professor Chauvenet brought to his attention the need of systematic education for midshipmen. The Secretary saw that to effect the adoption of the plan he must first conciliate the older officers of the navy. The service was induced to give its assent through a board of officers, to which Mr. Bancroft diplomatically referred the subject, and after the school was established and in operation on the military reservation of Fort Severn at Annapolis, jurisdiction over which had been ceded to the navy, the Secretary asked Congress for an appropriation "for repairs, improvements, and instruction." The appropriation was promptly made by the



Photograph by Stalce

PAYMASTER-GENERAL EDWIN STEWART

House, but rumors were current that the Senate would decline to concur. Having great personal influence, Mr. Bancroft exercised it, with the result that the appropriation was granted and the naval academy legally established. From that day until the present there has been gradual improvement in the curriculum of the institution. It was one of the most important acts of my time when Congress, in compliance with urgent recommendations, authorized in 1898 the reconstruction of the academy buildings, at a cost not to exceed eight million dollars — since raised to ten. The reconstruction is now in progress, in accordance with a plan prepared by a board of officers appointed by Secretary Herbert, although that official, on account of the condition of the national finances, considered it too comprehensive for immediate adoption. When the academy is rebuilt, it will be an institution superior to anything of the kind in the world, and will meet every requirement of instruction and convenience. Prince Henry of Prussia, on the occasion of his visit to the United States in 1902, inspected the naval academy, and expressed to me surprise that we should be spending such a large sum of money on an educational institution rather than for men-of-war. It was with a feeling of patriotic pride that the response could

be made that the resources of our country are so great that it can undertake, without anticipating embarrassment, the construction of an academy worthy of the personnel of which it is the source of supply, and yet have ample funds with which to continue the building of ships.

Since the establishment of the naval academy, more than twenty-five hundred midshipmen and cadets have been graduated, and the cost to the country has been about eight million dollars — a sum equal to that which will be paid for its reconstruction. That the organization of the school has amply repaid the country is shown, first, by victories gained by our navy in the Civil and Spanish wars, and their far-reaching results, and, second, by the progress made in naval science, with its tremendous effect upon industrial development, for which many officers are to be credited.

The very nature of an officer's duties necessitates constant study of the subjects which they embrace. The course at the naval academy covers four years, and the cadets are then sent to sea for a two years' cruise, upon the expiration of which they return to undergo final examination. There is no good reason for more than one year's cruise at sea. At the end of that time, even if not at once upon graduation, the cadets

should receive commissions as ensigns if found qualified upon examination. During his career at the academy the cadet performs the duties of seamen and officers of every grade. He is carefully instructed in gunnery, navigation, and seamanship. He learns English and French, and now Spanish, as well as something about international law and history, becomes a proficient mathematician, and acquires a knowledge of physics, chemistry, and hygiene. Because the naval officer of to-day must be an engineer, he is thoroughly grounded in marine engineering, both electrical and steam, and naval construction. When commissioned, he is on occasions given tours of duty at the torpedo-station at Newport, where he receives instruction in the construction and operation of the torpedo, and at the Washington Gun Foundry, where he takes part in assembling forgings into great guns. He undergoes a post-graduate course at the naval war college—an institution established at New London, Conn., almost simultaneously with the reconstruction of the navy. The naval war college, like the naval academy, was not brought into existence by authority of Congress. Secretary William E. Chandler, under date of May 3, 1884, organized a board of naval officers, consisting of Commodore S. B. Luce, Commander W. T. Sampson,

and Lieutenant-Commander C. E. Goodrich, to report upon the subject of a post-graduate course for officers of the navy. Explaining to the Senate the reason for the establishment of the institution, Mr. Chandler stated that "the constant changes in the methods of conducting naval warfare imposed by the introduction of armored ships, swift cruisers, rams, sea-going torpedo-boats, and high-power guns, together with the more rigid methods of treating the various subjects relating to naval science, render imperative the establishment of a school where our officers may be enabled to keep abreast of the improvements going on in every navy in the world." In its report recommending the organization of the institution the board expressed the opinion that "a cogent reason for such a school is that there may be a place where our officers will not only be encouraged but required to study their profession proper—war—in a far more thorough manner than has ever heretofore been attempted, and to bring to the investigation of the various problems of modern naval warfare the scientific methods adopted in other professions." The course at the college is divided under two heads—the science and art of war, and law and history. The college has been in successful operation for fifteen years, and has been of much



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REAR-ADMIRAL PHILIP HICHBORN

Chief of the Bureau of Construction and Repairs during the war

benefit in fitting officers not only to command single ships and squadrons, but to perform properly numerous other important duties with which they are charged. I am confident that the training many officers received at the college has been of great service to them in times of peace and war. Toward the close of my administration instructions were given for the establishment of a post-graduate course in steam engineering at the naval academy. This was done upon the recommendation of Rear-Admiral G. W. Melville, the veteran engineer-in-chief of the navy, and the course will enable officers of the new line to perfect themselves in the science of their profession. The medical officer was not overlooked, and a medical school was established in Washington. Arrangements were made with the War Department for harmonious coöperation with the medical school of the army. Medical officers of the navy have had no sufficient opportunity to study their profession, and coöperation with the army will not only fill this want but create a healthy mutuality which will stimulate both services. The war college is now at Newport, R. I.

In the navy to-day there is missing from the list of titles of officers one which for half a century occupied an honorable and increasingly important position upon it—that of engineer. The

introduction of steam into the navy caused the appointment in 1836 of Mr. Charles H. Haswell, of New York. He was the first engineer of the service. In spite of the element in the navy and the country which clung to sails, it speedily became apparent that steam propulsion must be adopted for men-of-war, and about 1842 Congress had authorized the construction of four steam vessels—the Fulton, Mississippi, Missouri, and Michigan—and one steamship, known as the Engineer, had been purchased. For the design of the machinery of the vessels the construction of which was authorized, and for its care and operation after installation, twenty engineers were appointed. The engineers were dissatisfied with their status and pay and with the appointment of a man who was not familiar with the principles of their profession ; and an appeal was made to Congress for adequate recognition. Agitation was effective. Congress, by the act approved August 31, 1842, created the staff engineer corps of the navy. This act provided for the appointment by the Secretary of the Navy of one chief engineer, two first assistant, two second assistant, and three third assistant engineers for each steam ship-of-war, to be paid salaries ranging from \$500 to \$1500 per annum. Three years later a law was enacted authorizing



Photograph by E. Muller

CAPTAIN WILLARD HERBERT BROWNSON

Present Superintendent of the U. S. Naval Academy

the President to appoint engineer officers, and in 1860 Congress granted substantial increases in pay to officers of this corps. In the mean time the question of the relation of the staff to the line had become a subject of controversy, and Secretary Toucey, in January, 1859, issued an order announcing the relative rank of officers of the staff corps. This order explicitly stated that it conferred no authority to exercise military command "except in the discharge of their [officers of the staff corps] duties, and no additional right to quarters." Congress enacted Mr. Toucey's order into law, striking out the words "except in the discharge of their duties," and thus, the engineers claimed, increased their embarrassment and difficulty in controlling and disciplining the men of their divisions. The value of steam propulsion had been demonstrated before the Civil War, but the events of that struggle emphasized its superiority over sails, and established the fact that men especially trained in the manipulation of engines must be employed. When the naval academy was founded, Lieutenant James H. Ward, a member of the faculty, foresaw the important part steam would play in the future service, and arranged that it should be one of the principal subjects of the course. With his detachment from the academy less at-

tention was paid to steam, and it was soon made a subordinate branch of the department of natural philosophy. During the Civil War Secretary Welles called the attention of Congress to the desirability of educating steam engineers, and a law was enacted in 1864 authorizing the instruction at the academy "as naval constructors or steam engineers of such midshipmen and others as may show a peculiar aptitude therefor." Secretary Welles was not satisfied with the law, and he asked, before the plan was put into operation, whether steam engineering should not be made to constitute a necessary part of the education of all midshipmen, "so that in our future navy every line officer will be a steam engineer, and qualified to have complete command and direction of the ship." Here was the first official suggestion for the present consolidated line of the navy. The young men appointed under the act of 1864 and enactments in the years immediately following were styled cadet engineers, and in 1882 they were transformed into naval cadets of the line.

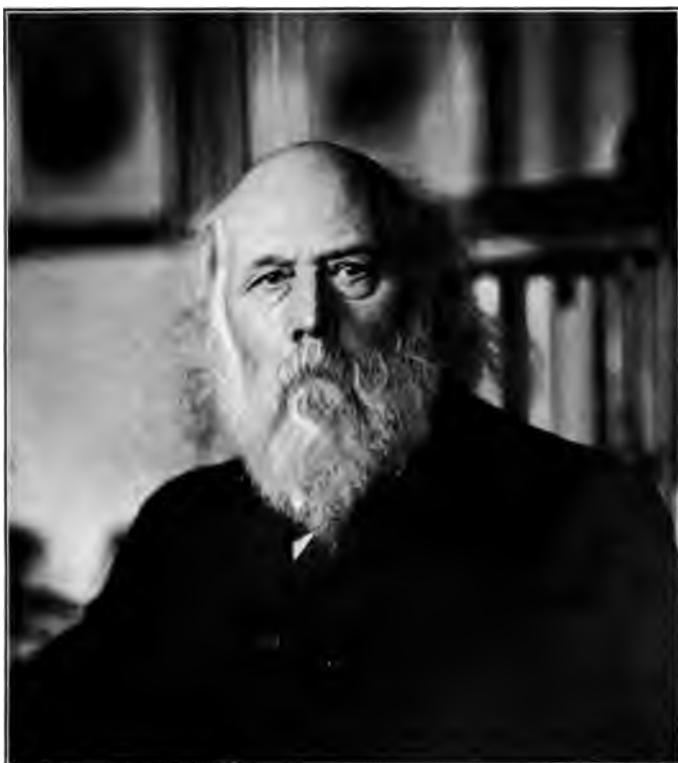
This last law was intended to settle the line and staff controversy, which had been raging on board every war-vessel of the navy, and which had already attracted the attention of thinking men of the country. So long as the engineers of the navy were appointed from civil life, it was

✓ plain that there could be no agreement between them and officers of the line bred in all the traditions of the service. The antagonism extended to the students at the naval academy, the cadet engineers among whom had been by law organized into a separate class, and the amalgamation of the cadet engineers and the midshipmen failed to produce the desired effect. Those graduates assigned to the engineer corps speedily became out of harmony with the line, and there was little disposition on the part of the line to promote harmony by coöperation with the engineer corps. The difference in views between the two branches of the service appears very clearly in the testimony given before the House Naval Committee when it was investigating the question of reorganization of the personnel.

At the beginning of my term in the department the discussion between the line and the staff was a matter of immediate importance. Naval officers naturally felt keen interest each in his own corps. The engineering profession throughout the country had become a party to the issue, and was demanding that its representatives in the navy should receive that measure of official recognition which the high character of the calling requires. Secretary Herbert had prepared a bill for the reorganization of the line, which

contemplated the removal of a large number of officers by transfer either to a reserve or to the retired list, and by increase of officers, principally in the higher grades. A bill was also introduced granting actual rank, military title, and adequate numbers to the engineer corps. Neither the Herbert bill nor the engineer bill had been adopted, and the condition I found was that of stagnation in promotion, with its train of evils, and of the existence of friction between the line and the staff, which not only produced inefficiency, but which, through its effect upon Congress, almost endangered the upbuilding of the navy.

Representative Francis H. Wilson, of New York, the recognized champion of the engineers in the House, had frequent conferences with the department in regard to the action which should be taken for the restoration of harmony in the service. Mr. Theodore Roosevelt — now President — was then assistant secretary, and was especially active in this direction, obtaining the views of rival factions. As a result of full consideration of this matter, I appointed a board to which was confided the preparation of a plan for the reorganization of the personnel. Mr. Roosevelt was made president of this board. Had a line or an engineer officer been named, the board



Photograph by Henry Hoyt Moore

REAR-ADMIRAL GEORGE WALLACE MELVILLE

Chief of the Bureau of Steam Engineering during the war

at the outset would have been embarrassed. By designating the assistant secretary, who was recognized as an earnest friend of the service at large, the line and the staff were certain of fair rulings upon questions which might arise between them. Mr. Roosevelt was intended to serve, and did serve, as moderator. The line was represented by two chiefs of bureaus, Commodore Crowninshield and Commodore W. T. Sampson, and four other officers of standing and influence in the service — Captain A. H. McCormick, Captain Robley D. Evans, Commander J. N. Hemphill, and Lieutenant-Commander Richard Wainwright. The engineer corps, which comprised fewer officers than the line, was represented by four officers — Commodore George W. Melville, engineer-in-chief and chief of the Bureau of Steam Engineering, a man of common sense, judgment, and possessing the implicit confidence of his subordinates; Chief Engineer Charles W. Rae, Chief Engineer George H. Kearny, and Passed Assistant Engineer Walter M. MacFarland. The recorder of the board was a line officer — Lieutenant Albert L. Key. No other corps were given representation on the board, because the main question was between the line and the engineer corps.

The board was in session for about a month.

✓ The representatives of both the line and engineers manifested an earnest desire to come to an understanding. Commodore Melville submitted a proposition for an independent engineer corps, which should comprise 303 officers, who should have positive rank and military titles and the same right of absolute command over their own divisions which watch and division officers of the line have, the chief of the Bureau of Steam Engineering to have the rank and pay of a commodore. This proposal was rejected, and then Captain Evans submitted a plan, which had all along been in the mind of the department and of the board, for the amalgamation of the line and the engineers. This solution, though at first sight revolutionary, was really the final step in the process of evolution through which the navy was passing. The fundamental studies of officers of the deck and engine-room at the naval academy were identical; the younger line officers served in engine-rooms on torpedo-boats, and line as well as staff officers underwent training in machine work, if not in the engine-room, in departments devoted to electrical and ordnance equipment. In the old days of sail, the naval officer was first of all master of the motive power; why not in the days of steam? The acceptance of the proposal by the engineers was followed by

the drafting of the provisions of a bill to be laid before the Secretary for transmission to Congress. Examination of this showed that, besides providing for the combination of the line and engineer corps, it enabled the voluntary retirement of officers in the grades of captain, commander, and lieutenant-commander, should natural causes fail to produce a certain number of casualties in those grades and in that of lieutenant; and that should the casualties and voluntary retirements be not sufficient to cause the average vacancies fixed, then a board of rear-admirals should select a limited number of officers for retirement. Whether voluntarily or compulsorily retired, the officers affected were to receive the rank and three fourths of the sea-pay of the grade next higher to that which they had attained at the time of retirement. Here were then provisions that the board contemplated enacting into law, which permitted valuable officers to go on the retired list, though it was plain that ships under construction would require when commissioned the services of all that could be gathered, and which also gave the benefits of retirement with increased rank and pay to officers who were unfitted for duty, and less deserving of such consideration than others retired without any premium because of disability incurred in the line

of duty. I transmitted the bill to Congress with a recommendation for the enactment of its provisions, with the exception of those specified. It was believed that such a law would bring harmony into the service, and the results of its operation since enactment in 1899 have justified this belief. It still seems advisable that the voluntary and compulsory retirement provisions should be modified so that officers affected by them shall retire with the rank and three fourths of the sea-pay of the grade held at the time of retirement, and not be given a premium for getting out of the service. The bill further provided that the navy should receive army pay, that the title "midshipman" should replace that of "cadet" for students at the naval academy, that the course at the academy should be reduced from six to four years, and that the good old title of "commodore" should be dropped — very likely a proper, but certainly, from the standpoint of sentiment and historical association, a regrettable provision. It created a corps of warrant machinists, and improved the condition of the enlisted force by conferring upon its members the same privileges and rights respecting retirement and pension that obtain in the army and marine corps. The enthusiasm aroused by sea victories during the war with Spain caused the enactment of the bill



Photograph by Clinedinst

REAR-ADMIRAL WILLIAM KNICKERBOCKER VAN REYPEN

Chief of the Bureau of Medicine and Surgery during the war

with some amendments and additions, the latter relating mainly to the marine corps.

It was loudly urged against this reorganization bill that it would operate to the disadvantage of the service; that the age was one of specialization, and that it was impossible to make a fighting man a "jack-of-all-trades." Those who made these statements forgot that in amalgamating the line and engineer corps we were simply repeating history; that England's ships were once sailed by men especially employed for that duty and fought by soldiers who had nothing to do with the operation of the vessels; but the combination of these two types produced the sailor who could not only sail his ship but who could fight it as well. When steamships entered our navy, the sailor, clinging to the traditions of his calling, jealously refused to surrender his privileges and prerogatives to the engineer. As the work of the soldier and the sailor gradually approached each other and finally intermingled, so has that of the navigator and the engineer. The personnel law was framed to meet special conditions, and so long as those conditions exist it will produce the results intended; but when they change, it will require revision. It would not be surprising should the machinists warranted under the personnel law become a future

engineer corps, just as the late engineer corps developed from civilians appointed into the navy during the early years of steam.

The officers command a ship, but the brawn and its intelligent application are supplied by the enlisted men. In the old navy the ships were manned by sailors who could patch a sail, knot a parted shroud, repair a boat, sponge, load, and fire a gun, — in fact, do any work appertaining to their rating. Boys were enlisted as powder-monkeys and for other light work. That they were distinguished by the same ardor as possessed their older comrades is shown by Captain Hull's report on the battle of the Constitution and the Guerriere, in which he said that "from the smallest boy in the ship to the oldest seaman, not a look of fear was seen. They all went into action giving three cheers and requesting to be laid alongside of the enemy." Enough American citizens not engaging in the national and merchant marines, causing the employment of many foreigners in this branch of the governmental and industrial services, the suggestion was made in 1835 that boys be enlisted and trained in the ways of the sea. Congress incorporated the suggestion into law in 1837, and under the authority granted him Secretary Paulding enlisted several hundred youngsters and distributed them

among the line-of-battle ships Columbus and North Carolina and the frigates Java and Hudson. The plan was inaugurated under auspicious circumstances, but, the department announcing that the apprentices would not receive commissions, interest disappeared and failure followed. A second effort to establish the apprentice system was made by Secretary Welles. The experiment at first produced gratifying results, justifying a belief in important future benefit to the service. Thinking an opportunity to attain commissions would encourage the boys, Secretary Welles, in his annual report for 1864, suggested that "from among the apprentices on the schoolship, a selection of one half of the midshipmen appointed might be made with great advantage to the service and to the country. . . . It would popularize the service and open to those who may have enlisted the highest positions and honors in the service." Mr. Welles succeeded in having a number of apprentices sent to the academy, where they were examined for admission; and some of the able officers to-day are those who underwent their first naval experience as enlisted boys.

Discouraging though the attempts of his predecessors were, Secretary Robeson, in 1875, issued a circular authorizing the enlistment of a

certain number of apprentices. There was imperative need of such action. The percentage of foreigners in the navy at this time had reached such a high figure that confusion and inefficiency prevailed. Admiral David D. Porter thus described the humiliating condition of our enlisted force when the reconstruction of the navy began: "A few years ago one of our ships with a cosmopolitan crew was anchored in the harbor of Villefranche. The crew represented nineteen different nationalities, and so inefficient was the organization that some wag painted on a board and hung in the gangway, 'Ici on parle Anglais,' like the signs in Paris shops. When the *Trenton* went into commission, as fine a body of Germans, Huns, Norsemen, Gauls, Chinese, and other outside barbarians as one could wish to see were on board. Of the whole number not more than eighty could speak English. These men shipped for money. They had no sentiment for our flag or nationality, and possibly if it came to an action with a ship of their own or neighboring nation they would haul down the American colors and hoist their own."


National pride demanded an American navy. So the apprentice was encouraged. In 1881 the city of Newport ceded Coaster's Harbor Island in Narragansett Bay to the government as a site



Photograph by E. Muller


TRAINING-SHIP HARTFORD

for a naval apprentice station. During my administration the island of Yerba Buena, in San Francisco Bay, was acquired, and upon it a modern training-station for apprentices was built. When Secretary Robeson made the third attempt to organize an apprentice training-system, it was predicted that it would fail. To-day it is one of the important branches of supply for our enlisted force. It seemed a violation of the principles of the Republic to maintain a service which limited the achievements of an employee; and regarding Secretary Welles's plan as eminently just and proper, I recommended that Congress enact a bill permitting the commissioning of enlisted men promoted from apprentices, after examination of their mental, moral, and physical qualifications. The law, as passed, fixes the number of these appointments at six annually; it has since been increased. In the twenty-seven years during which the apprentice system has been in operation more than fifteen thousand boys have attended the course, and those who have not remained in the service have, in the majority of cases, made useful citizens. The apprentice system has also been important in bringing about the Americanization of the navy. Various measures were adopted from the beginning of the New Navy to displace the foreign element in the service.



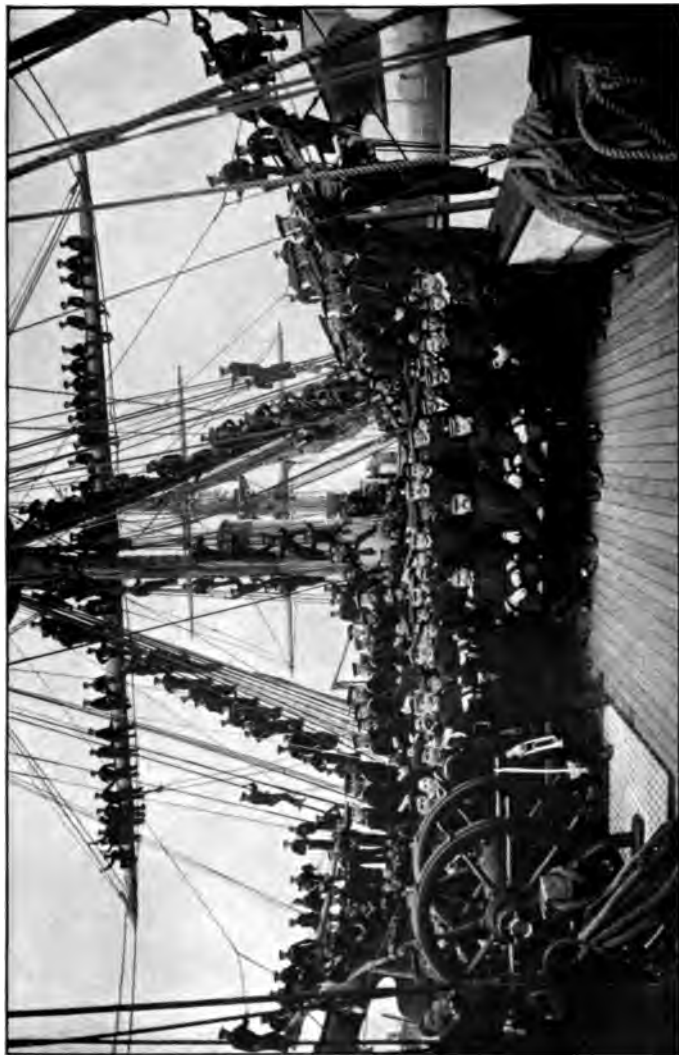
At the time of my entrance into the department in 1897, almost twenty-five per cent. of the enlisted men were foreigners. As a means of reducing this proportion, enlistment stations were established in the interior of the country and along the Lakes. The material thus obtained was of such an excellent character that when Congress made substantial increases in the enlisted force, these and additional stations were maintained. Recruits are placed on board receiving-ships, where they learn the rudiments of their future calling, and are subsequently distributed among training-ships. When their preliminary education is concluded, they are transferred to regular cruising vessels. Arrangements had been perfected before my retirement from the department for the training of four thousand landsmen annually. Congress should authorize barracks for the accommodation of raw recruits. On shore, under the observation of officers, it will be an easy matter to reject those men who fail to show aptitude for the service, retaining only the best material to be wrought into the finished seaman. The effect of the enlistment of landsmen on the Americanization of the navy is shown by the fact that almost ninety per cent. of the enlisted force is to-day American by birth or naturalization.

Improvements in the *matériel* of the navy have brought about the necessity for an enlisted personnel of high intelligence and skill; and with these qualities has come the need of better provision for enlisted men. The sailors of the old navy were subjected to hard conditions; they are treated to-day as men. Fifty years ago they received whatever training was given them on shipboard. Even in the New Navy, until 1897, only the torpedo school and the gun foundry were open to them. The use of electricity on board war-ships grew to such proportions during my time that it was deemed advisable to establish an electrical school at the New York navy-yard. The gunnery course was completed by practical training on the monitors *Amphitrite* and *Puritan* in North Atlantic waters. To stimulate the men, the rating of gun captain was created. It is a gratifying fact that ships to which gun captains were detailed showed considerable and immediate improvement in target practice. The clerks of the navy are known as yeomen. That men enlisted for this rating might properly understand their duties, a yeoman's training-school was established at New York. One of the later acts of my time was the direction to establish at the Norfolk navy-yard an artificers' school. Here experience in shipwork will be given to car-



penters, shipfitters, blacksmiths, coppersmiths, ship's plumbers, and men of other ship's trades. That every ounce of coal may produce the largest volume of steam, and that engines and boilers may not be rapidly worn out, a training-school was provided for firemen. The Cincinnati, the bowels of which are one mass of machinery, was selected for use as this school.

No description of the personnel of the American navy would be complete without a reference to the marine corps. An early Continental Congress authorized the organization of a body of marines. The Congress of the United States, which directed the construction of the first ships of the old navy, simultaneously provided for the commissioning of marine officers and the enlistment of men for the guards. In all our wars the marines have distinguished themselves. On nineteen separate occasions Congress has, by joint resolution, expressed its sense of appreciation of their valor and good conduct. After the Civil War a movement was inaugurated to abolish the corps, but a thorough investigation by Congress established the inadvisability of such action. Many line officers have expressed the opinion that the marine corps is no longer needed on board ships, and several years before the Spanish War the attempt to bring about its abo-



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OFFICERS AND CREW OF THE TRAINING-SHIP HARTFORD





lition was renewed. Colonel Charles Haywood, now major-general, commandant of the corps, appeared before the personnel board in 1897 and earnestly opposed amalgamation with the navy. The corps was reorganized and enlarged by the personnel law — action which met with general approval in view of the new laurels added to its record by the battalion which served at Guantanamo, where the corps rendered especially brilliant service, as well as on the ships at Manila and Santiago, and ashore in China and the Philippines.

IV

THE ADMINISTRATION OF THE NAVY

GREAT results often overshadow and prevent due recognition of the merit and vital importance of the preparations which make possible their achievement. The navy, triumphant in battle, is a very different thing in the eye of an admiring country from the same navy preparing for the conflict. In one scene the actors are the picturesque and glorious fighters on deck; in the other, the bureau chief at his desk, the constructor in his shirt-sleeves, the forger of the great guns, the painstaking official providing his great coal-pits at easy reach. We laud the successful captains; too often we forget the men who made ready at their hands the material that made their victory sure. The names of Preble, Hull, Decatur, Porter, Farragut, and of recent naval leaders, are resplendent names on the pages of our history, but who recalls or knows the names of the congressmen who secured the authorization of the ships on board which these heroes won their way to immortality, or of the naval officials who designed and built and

equipped them, and on whose shoulders the final responsibility for the conduct of vessels and crews in hostile operations largely rests?

The first war Secretary of the Navy was Benjamin Stoddert, of Maryland, who administered the service during the quasi-war with France. Robert Smith, of Maryland, sent to the Mediterranean the forces which humbled the Barbary States and enforced respect for American citizenship. Paul Hamilton, of South Carolina, and William Jones, of Pennsylvania, directed the fitting out and the dispatch to what appeared certain defeat but was in nearly all cases significant victory, of our ships in the second war with Great Britain. By his effective and excellent administration of the fleets of our Civil War, Gideon Welles earned the grateful appreciation of his country.

Too often forgotten are the men who in time of war are in subordinate departmental positions. The few clerks who faithfully carried out the instructions of Stoddert, Smith, Hamilton, and Jones, and undoubtedly did a large part of their work, are to-day unknown. The navy treasures the name of Gustavus V. Fox, the able assistant of Secretary Wellès; but a small percentage of the present generation of the American people are aware of his faithfulness, his

capacity, and the far-reaching results of the labor he performed. Entitled to special remembrance also are the bureau chiefs of the Civil War; but only the tons of musty records incumbering the files of the Navy Department tell of the way in which they fulfilled their duties. And coming to the war with Spain, are not Theodore Roosevelt and Charles H. Allen, the assistant secretaries, and Arent S. Crowninshield, the chief of the Bureau of Navigation, and Charles O'Neil, the chief of ordnance, and George W. Melville, the engineer-in-chief, and Philip Hichborn, the chief constructor, and Royal B. Bradford, the chief of equipment, and Edwin Stewart, the paymaster-general, and William K. Van Rypen, the surgeon-general, and Mordecai T. Endicott, the chief of the Bureau of Yards and Docks, and Samuel C. Lemly, the judge advocate general, and Benjamin F. Peters, the chief clerk, and their subordinates, worthy of remembrance in connection with those who actually participated in battle? How promptly Congress rewarded Dewey and his captains! How quickly would there have been action in behalf of the Santiago officers had it not been for the unfortunate Sampson-Schley controversy! On the other hand, what indifference when it was urged that national acknowledgment be given

to the officers who, though aware that only at sea could glory be won, placed duty above desire and patriotically remained at their desks, though at first some of them pleaded with tears in their eyes for service afloat!

The central function of the navy is the Navy Department at the national capital. This is the organ which directs all members of the service, which is bound to detect any weakness in the navy system and replace it with new and healthier growth, and which centralizes all its forces for striking the sea power of an enemy. That navy is the most efficient and effective which, other things equal, is the most intelligently administered. The height naval education will reach depends upon the standard fixed for its attainment.

It is to the Navy Department, therefore, that the country looks for an efficient navy when means for the ships and men have been provided. And to the department to-day I believe the country may so look with confidence. It is true that, like any other great institution in which the element of human nature is active, it still, to some extent, lacks cohesion and harmony, and in the transaction of business, even of routine character, there are now and then friction and wrangling in some details on the part of

intelligent and able officials which would not be tolerated in a civilian establishment. The system, however, and not the men, are at fault; indeed, in the main they work together with tremendous effect. Differences of opinion are better than lifelessness. Nor is it surprising that they should sometimes be accompanied by pettiness of personal feeling when one considers the way in which the departmental organization has grown, how necessity and expediency have developed it, and how intangible sometimes are the lines of demarcation between the authority and duties of the several bureaus.

The navy of the Revolution did effective work in that epochal struggle, but the credit for its achievements is little due to the several boards and committees which Congress appointed to create and administer it. In spite of the successes of the revolting colonies on the sea, especially of their persistent and lucky privateers, and the importance attached by Europe to our naval promise, the founders of our federal government thought the navy of so little consequence that the Secretary of War was charged by the first Congress under the federal Constitution with supervision of naval affairs. Soon, however, unfamiliarity with the construction of vessels of war, and with naval business



REAR-ADMIRAL MORDECAI P. ENDICOTT

Now Chief of the Bureau of Yards and Docks



generally, led the war authorities to make the blunt confession that a separate department for the navy was absolutely essential, and an act, approved April 30, 1798, established the Navy Department, the head of which was named the Secretary of the Navy and made a cabinet officer, subordinate to whom were a principal clerk and such other clerks as he required. This organization carried the navy through the war with France, the war with the Barbary States, and the war with Great Britain. Defects, however, developed which demanded correction. A Secretary unprovided with expert professional assistance, and untrained in the technicalities of naval affairs, might have become at critical times a dangerous instead of a helpful factor in the service. "The multifarious concerns of the naval establishment," wrote Secretary Jones in 1814, "the absence of wholesome regulations in its civil administration, and the imperfect execution of duties due to want of professional experience, lead to confusion and abuses."

This plain statement convinced Congress that no further time was to be lost in reorganizing the department, and by an act approved February 7, 1815, six weeks after the signature of the Treaty of Ghent which closed the war with Great Britain, a board of navy commissioners

was added to the department. This board consisted of three officers of the navy, of rank not below that of post captain; and the law required it, under the supervision of the Secretary, to discharge all the ministerial duties of the department relative to the procurement of naval stores and materials, and the construction, armament, equipment, and employment of vessels of war, as well as other matters connected with the naval establishment. It is true that this organization sometimes exemplified the truth of the old aphorism, "In divided power there is no individual responsibility." Also that the navy commissioners were usually men unfamiliar with the mechanical craft of shipbuilding, although by law given the right which they exercised to alter or reject plans of a projected ship which the constructors, subordinate to them, might submit. Also that the Constitution, the United States, and the Ohio, designed by Constructors Humphrey and Eckford, were the favorite and fastest ships of the navy in 1840, while those of later date, for which the navy commissioners were responsible, were clumsier and by no means the equal in speed of the fleet and graceful merchant ships laid down at American seaports. The board, however, was progressive, notwithstanding its ignorance of the science of ship-designing, and

was earnest to recognize and take advantage of improvements in the art of naval warfare. From 1815 to 1842, the lifetime of the board, the navy increased many-fold, and Cooper thus testified to its efficiency: "As respects the navies of this hemisphere, it was (in 1845) supreme, the united marines of all the rest of the continent being unable to contend against it for an hour." Still, due in part to the fact that the law required the board to act as a unit, and in part to other defects of the system, the abuses of which Secretary Jones complained continued to some extent either in the same or new forms under the navy commissioners, causing the celebrated Matthew Maury, then a young ensign in the navy, to write this criticism: —

"To what page soever I turn, I find my notebook filled with memoranda which exemplify the evils of the present system. However distinctly within the walls of the Navy Department usage may have drawn the line of demarcation between the duties of Secretary and navy board, or however well it may be understood there, you will find but few able to trace it out of that building. Ask officers of the navy where the duties of the navy board begin? or where its responsibilities end? or where rests its accountability? — and no two will agree in their reply. Ask the best-

informed citizens the same questions. Some will tell you that the navy board is a power behind the Secretary, greater than the Secretary himself — that there is a master spirit in that board which rules the navy. Others will tell you that the evil genius of the navy presides at that board. Him they unjustly charge with everything that goes amiss, and would hold responsible for the present condition of the navy.”

All which, even at the present day, has rather a familiar sound to anybody who recalls those criticisms of the Navy Department or any other department, which are always in the air. “The evils of the present system” are always with us and always will be.

Congress, cognizant of imperfections in the departmental system, in 1839 called upon the Secretary of the Navy to suggest a plan of reorganization which should make a proper division of the duties performed by the naval commissioners. Disheartened by criticism and oppressed by the growing burdens which the increase of the navy and the new problems which developments in the science of naval warfare had laid on them, the commissioners at last officially admitted that their usefulness had gone, and recommended the introduction of a system of bureaus practically identical with that



CAPTAIN SAMUEL CONRAD LEMLY
Judge-Advocate General



which exists to-day, with the exception of the Bureau of Steam Engineering. Steam was then in its infancy, and was not considered sufficiently important to warrant supervision as a separate feature of the naval establishment. The Senate adopted the recommendation of the commissioners, which contemplated the organization of seven bureaus, but the House reduced the number to five, and in this reduction the Senate concurred. The bureaus created by the act of August 31, 1842, were Navy-Yards and Docks; Construction, Equipment, and Repairs; Provisions and Clothing; Ordnance and Hydrography; and Medicine and Surgery, the titles indicating the duties respectively assigned to each. A line officer of the rank of captain was made chief of each bureau, with the exception of the two bureaus of Provisions and Clothing, and Medicine and Surgery. In 1853 John Lenthall, a naval constructor, was appointed chief of the Bureau of Construction, Equipment, and Repairs.

The bureau system did not escape criticism as sharp as that leveled at preceding organizations. The Civil War demonstrated elements of inadequacy, and Congress in 1862 added the Bureau of Steam Engineering, created the Bureau of Navigation, and took equipment from Equip-

ment, Construction, and Repairs, making it, with recruiting, a separate Bureau of Equipment and Recruiting. The rebellion also brought into existence the office of Assistant Secretary of the Navy, which was authorized in 1861 and abolished in 1869. It was reestablished in 1891 in accordance with the recommendations of the secretaries who had engaged in developing the New Navy. Questions involving interpretation and application of the law constantly arising, and the need of an officer specially charged with the supervision of courts-martial and also with the very important and growing matters of contracts of all kinds to which the Navy Department is a party, caused Congress in 1865 to direct the appointment of a "Solicitor and Naval Judge Advocate General." With some difficulty Congress was induced, just before the construction of the New Navy, not to discontinue the office. It is to-day a very important branch of naval administration, especially in view of the dealings, involving many millions of outlay, of the Navy Department with contractors of all sorts.

Scandals and abuses had flourished as the old navy declined. Regeneration of material was accompanied by reform of administration. Secretary Chandler found serious lack of respon-

sibility and coördination of work. To obtain greater efficiency, he recommended the appointment of three superintending naval constructors, who should have direct charge of all work relating to construction, steam engineering, and equipment, under the supervision of a chief of the Bureau of Naval Construction. Secretary Whitney reported that large private purchases were made by the bureau chiefs where the law intended that contracts, after due public competition, should be awarded to the lowest bidder. Instead of being in the hands of regular dealers, much of the business of the navy was controlled by brokers. During the fiscal year ending June 30, 1885, seven bureaus, acting independently of one another, expended \$138,000 for 166 several open purchases of coal, that is, without competition; eight bureaus made 299 open purchases of stationery; six bureaus bought lumber and hardware for which the government paid \$121,315 in 499 separate open purchases, and seven bureaus spent \$46,000 for oils and paints in 269 separate purchases. Mr. Whitney found that eight bureaus supplied ships with stationery and three furnished lamps and lanterns.

As the law authorizing the departmental organization places the assignment of duties in the hands of the Secretary, Mr. Whitney directed

comprehensive and wise reforms. He consolidated the business of conducting purchases in the Bureau of Provisions and Clothing, and made the paymaster-general responsible therefor. In order to check unnecessary accumulation of supplies and to reduce the expenditures for purchases made, the general-storekeeper system was created and the Bureau of Provisions and Clothing was charged with the keeping of property accounts. During the administration of Secretary Tracy the name of the Bureau of Provisions and Clothing was changed to that of Supplies and Accounts as more truthfully defining the duties it performs.

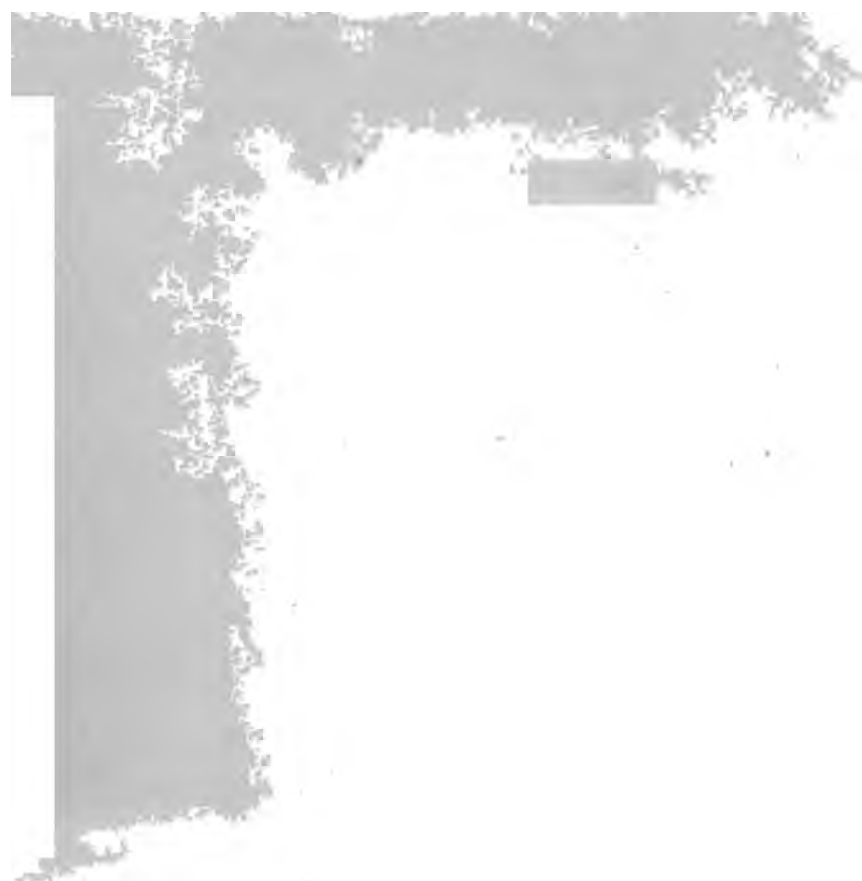
Secretary Tracy carried on the policy of reformation. When he assumed the naval portfolio, he found that "the details of administering the navy, as an existing force, its vessels in commission, its officers and its crews, were scattered, without system or coherence, among a variety of offices, bureaus, and boards." As illustrating the confusion which existed, the Secretary said in his report for 1889 : —

"The assignment of officers to duty, and, to a limited extent, the movements of ships in commission, were in charge of an 'office of detail,' at the head of which was the chief of the Bureau of Navigation, which bureau was, at the




REAR-ADMIRAL ROYAL BIRD BRADFORD

Chief of the Bureau of Equipment during the war



same time, supplying compasses, chronometers, and navigating instruments, electric-light plant, ships' libraries, and other miscellaneous articles. The enlistment and assignment of seamen belonged to Equipment, which was also engaged in the supply of another list of miscellaneous articles, and in the manufacture of cordage, galleys, chains, and anchors. The direction of gunnery practice by ships in commission was in charge of Ordnance, whose all-important duties in providing the navy with a modern armament left little opportunity for supervising the occupations of vessels at sea. The examination of those vessels on their return from a cruise was the duty of a Board of Inspection which was not associated with any bureau. The training of officers and men was in part conducted independently by the Naval Academy, and in other parts assumed by Navigation, Equipment, and Ordnance. To all these fragments of authority there was no central unity of direction, except such as could be given by the personal attention of the Secretary to the exclusion of that broad and general supervision over all executive business which is required by a department as comprehensive as the navy, and cases were not infrequent where a ship received simultaneous orders from three separate bureaus which were so directly contradictory that it was impossible to execute them."



Eradication of the defects which Mr. Tracy discovered was one of the important works to which he devoted his attention. The administration and operation of the fleet, including movements of ships and training, assignment, enlistment, inspection, and practice of the personnel, were assigned to the Bureau of Navigation. The miscellaneous duties of navigation, which properly came within the sphere of equipment of ships, were transferred to Equipment, which lost recruiting. The hydrographic office was by law attached to the Bureau of Navigation. Secretary Tracy recommended that it be placed under the Bureau of Equipment, but it was not until 1898 that legislation directing this was enacted.

Another step in the reformation of naval administration was taken by Secretary Herbert, my predecessor at the head of the Navy Department. Mr. Herbert, in 1894, issued a general order charging the Bureau of Construction and Repair with the responsibility for the design, structural strength, and stability of vessels built for the navy. This order was important for the reason that it enabled the department to hold a single officer accountable for the success or failure of a ship.

Thus, while examination of the history of the

✓ Navy Department in 1897 showed persistent effort to place the office upon a sound business footing, it was also found that much remained to be done before a satisfactory organization would be in operation. Prior to the first inauguration of President McKinley, Congress had not provided for the improvement of the navy-yards with the proportionate liberality which their importance to the steel fleet demanded. The demand for navy-yard reorganization at the time of the birth of the New Navy was so insistent that Congress, in 1882, directed the appointment of a commission to make a thorough investigation. This commission then advised a reorganization and concentration of the mechanical departments of the yards at New York, Norfolk, and Mare Island, the closing of the New London and Pensacola yards, the temporary shutting down of the League Island yard, and the retention of the Washington yard for the manufacture of standard articles, but not as a shipyard for the repair of vessels. Difference of opinion existed as to what should be done with the Boston and Portsmouth yards. The Secretary designated the Washington yard as the place where all ordnance work should be centered, directed that most of the construction and repairs of ships should be effected at the New York, Norfolk, and Mare Island yards, and

ordered that equipment work should be done at the Boston yard. The steady growth of the navy and the size it had attained in 1897 convinced me that the time had come to enlarge the capacity of existing yards and to equip others to do repair work. During my administration the yard at Port Royal, S. C., was the only yard abandoned, but in its place Congress authorized the establishment of an important naval station at Charleston, in the same State.

A step toward the effective reconstruction of the yards was the appointment of a competent chief of the Bureau of Yards and Docks. From the time of its creation this office had been held by officers of the line who possessed little expert knowledge in civil engineering. Knowledge of this science is essential for the proper planning of naval stations, the construction of dry docks, and erection of buildings. A vacancy occurring, the President, upon my recommendation, appointed as chief of that bureau for the term of four years — the period fixed by law — Civil Engineer Mordecai T. Endicott, an officer of good standing in his profession and for a long time on duty in that bureau, who had theretofore given evidence of efficiency and skill. Congress, at last satisfied that an effective fleet must have bases, and be equipped with appliances for



Photograph by Rice

MAJOR-GENERAL CHARLES HEYWOOD, U. S. M. C.



prompt repairs, authorized extensive navy-yard improvements. Five years ago the docking facilities of the country were totally inadequate. There were but three docks capable of receiving battle-ships — one at New York, known as Dock No. 3, a timber structure, which was defective on account of both location and workmanship; one at Port Royal, built of timber, the cross-section of which was too small to permit the entrance of a battle-ship fitted with bilge-keels, and which could be approached only at high tide; and the third, also timber-built, at Bremer-ton, Washington, which was the best of its size belonging to the government, but which had the disadvantage of being within striking distance of the British naval station at Esquimaux. The prospect of war with Spain and the need of a dock on the Atlantic coast available for battle-ships in case of injury caused the department to take measures for putting Dock No. 3, at New York, in condition for service, and it has since been practically in continuous service. A significant indication of our lack of sufficient docks was furnished in 1897 by the mortifying necessity of sending the battle-ship *Indiana* to Halifax to have her bottom scraped and cleaned.

A board of officers was appointed in 1897 to consider the docking requirements of the navy,

and in the light of its report, the department recommended the construction of stone and concrete docks at Boston, Portsmouth, N. H., and Mare Island, Cal., a steel floating dock at Algiers, La., and the enlargement of docks at New York, League Island, Pa., and Norfolk, Va. Congress investigated the relative merits of timber and stone and concrete docks, and in 1898 provided for four timber docks and one steel floating dock; but authority was afterwards given to the department to build these four docks of the more solid material. The construction of these docks of masonry has definitely committed the government to this type, the advantages of which are greater safety, longer life, and less repairs. Though these docks, which are now nearing completion, were at the time of their design the largest ever built by the United States, three others, also of stone and concrete, which Congress subsequently authorized, will be even deeper and wider, accommodating any of the immense battle-ships which are under construction or contemplated. The floating dock for Algiers is in successful operation at the naval station at that point. During the five years of my term Congress authorized the construction of seven masonry docks, one steel floating dock, and the rebuilding of one timber dock in concrete. In addition, the department




Drawn by Henry Reuter

DOCKING A WARSHIP

The cruiser Brooklyn entering the dry-dock at the Brooklyn Navy-Yard

purchased for the small sum of \$250,000 the practically new steel floating dock at Havana, which had cost Spain \$600,000. In 1897 there were eleven government docks, only three of which could accommodate battle-ships of the first class. There are to-day, built or under construction, twenty-one government docks, eight of which are designed to receive the largest ships and three others ships of 10,000 tons displacement. Even with this number, we are far behind the maritime nations of Europe. In the single yard at Portsmouth, England, there are more dry-docks than we have to-day in our whole service. Germany, the navy of which is about the same strength as our own, has seventy docks, two of which belong to private companies and are capable of receiving any of the Kaiser's battle-ships.

Besides providing docking facilities, Congress also authorized improvements in navy-yard plants. The navy-yard at New York is now equipped to construct battle-ships. That at Portsmouth, with an additional appropriation of \$175,000, and the yards at Norfolk and Mare Island, with an additional appropriation of \$225,000, can be made ready for building vessels of this type. The improvements under way at Boston will, within two years, fit that yard for this work.



The yards are to-day in condition to make repairs promptly, efficiently, and economically. The country should not think, however, that their improvement ought to cease. Much must be done to keep them in a state of efficiency. The coal-ing facilities of the country have also largely increased since 1897. A man-of-war leaving San Francisco for China or Australia will now find coal-piles distributed at convenient points along the route. Coal is the food of a modern ship, and war will demonstrate the strategical importance of these stations. In addition to coaling-depots, the United States owns twenty-three navy-yards and naval stations, the total value of which is not far from \$100,000,000.

The shore stations of the navy have been described at some length because knowledge of their condition is necessary to obtain an adequate idea of the responsibility which rests upon the shoulders of those who administer naval affairs. The several bureaus, which have departments at the various yards and stations, are tenacious of their prerogatives and guard them jealously, fearing, perhaps, that any innovation will be followed by diminution of their jurisdiction. The temptation to step beyond the limits of a bureau's authority as fixed by the naval regulations sometimes proves almost irresistible. The bureau




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HON. JOHN D. LONG

Secretary of the Navy 1897-1902

affected sharply resents the encroachment, and there immediately follows an exchange of communications, sometimes highly seasoned. The controversy is ultimately loaded upon the Secretary, who is expected to untangle the snarl in which his subordinates have wound themselves. The relations between the bureaus are occasionally so strained that ordinary courtesy is impaired. I recall that one bureau chief became highly incensed at another because of the latter's recommendations in connection with changes in the machinery of a cruiser. "Your recommendations," wrote the former, "are as inconsistent with your ignoring of the suggestion to withdraw the same as is your assumption of a 'best way to handle' these surveys antagonistic to simple bureau duties. The ostentatious display of a banner marked 'dispatch' may obtain the confidence of the unversed, but it is not the proof of ability to secure that desideratum which is required to satisfy expert criticism."

This is one of the many instances of the friction which sometimes exists, but which should by no means be regarded as the rule. There has at times been like lack of harmony between other bureaus. The cause of the trouble any one who investigates the matter will readily appreciate. Here are three or four bureaus charged with the



construction and fitting out of vessels, and while one, for example, is held responsible for the care and repair of all auxiliary steam machinery, it has no voice either in the design or installation of many of the auxiliaries. It frequently has happened that one bureau has brought its work to a point where, under the regulations, it should be taken over by another bureau, but the latter was not ready for it. Each bureau has a separate force of inspectors and corps of officers. As a ship is an integral work, it is evident that ✓ efficiency and economy could better be obtained by placing its construction, as far as possible, under one head. The construction and equipment of ships would thus be conducted under the system which is successfully employed in the private shipyards of the country. Leading up to this step, the department began in 1897 the substitution of electrical for steam power at navy-yards. Investigation had disclosed the astonishing fact that the power for operating the machinery of the different departments of the yards, instead of being supplied by a single plant, was furnished by boilers and engines scattered about the yard and operated by different bureaus. Of course separate gangs of men were required for each plant, and the amount of power obtained was relatively small for the coal used and the steam

consumed. Rectification of this extravagance was partially effected by concentration under the authority vested in the Secretary of the Navy. Legislation was, however, necessary before consolidation of the bureaus could be made. The bureaus of Construction and Repair, of Steam Engineering, and of Equipment, both as matter of economy and efficiency, should be under one head. Congress failed to adopt the recommendation to this end, just as it had neglected to act favorably upon recommendations contemplating somewhat the same result submitted by Secretaries Chandler and Whitney. This change must some time occur, and with it will come a sound business system which will introduce cohesion and unity in naval administration. The hydrographic office and the naval observatory should be placed directly under the Secretary of the Navy. The observatory is decidedly behind institutions of like character in the United States and Europe. It has always had as its superintendent a line officer, who sometimes possessed thorough and sometimes merely superficial knowledge of astronomy. The condition of the observatory has for two or three years past been brought to the attention of Congress, which directed the appointment of a board of visitors, whose criticisms have already brought

improvement in the work of the institution. It was urgently recommended by me that legislation be enacted removing all limitations from the field from which the selection of a superintendent may be made, but the "pull" was too strong. The country is entitled to its best astronomer for this great astronomical plant. This recommendation provoked strong opposition from some officers in the navy and their friends in Congress, which took the opposite direction, and even directed that the superintendent should be, "until further legislation," a line officer not below the rank of captain, thus limiting the place to a favored few and ignoring entirely the question of their capacity to fill it. The phrase, "until further legislation," gives some hope that Congress may later take more reasonable action with respect to the observatory. Good management and results commensurate with the expenditures made demand a competent head, and the agitation which has been begun by the scientific bodies of the country should eventually bring about the organization of a personnel which will make the institution the equal of any in the world; indeed, with its larger expenditures, it should be superior.

From the time the construction of the old navy began, every Secretary of the Navy has



Photograph by Henry Hoyt Moore

NAVY DEPARTMENT BUILDING, WASHINGTON



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felt the need of professional assistance. This want produced the board of navy commissioners and then the bureau system of the department. But the bureaus, working independently of one another and not always in harmony, so appropriated the space of a ship as often to leave her defective in some important particular. This unfortunate state of affairs was partially remedied by Secretary Tracy, who in 1889 constituted a board, called the Board on Construction, consisting of the chiefs of the five bureaus of Yards and Docks, Ordnance, Equipment, Construction and Repairs, and Steam Engineering, to which he gave general supervision over the design, construction, and equipment of ships. As the work of the Bureau of Yards and Docks was confined to shore stations, and as a civil engineer had been placed at the head of this bureau, it was withdrawn from representation on the board and the naval intelligence officer substituted. The board deserves great credit for the work it has done, especially under the presidency of Rear-Admiral O'Neil, whose tact and judgment, in many controversial questions, have facilitated the submission of the intelligent recommendations of the board to the department. To it are referred questions of general construction, differences of opinion between



bureaus, and especially the plans and specifications for new ships.

Beyond the Secretary of the Navy and the chief of the Bureau of Navigation there was, till recently, no well-organized system for the intelligent direction of the fleet after its construction and commission. The experience of the war with Spain showed the need of a general staff. The office of naval intelligence and the naval war college, both of which owe their creation to Secretary Chandler, were the first stage in the formation of the general staff; but they were not adapted to comprehensive supervision of the training and the operation of the navy in war. When the Carnegie Steel Company was first established, only a few officers were required for the administration of its affairs; but when its interests became large, a board of directors was necessary successfully to conduct its business. The general staff of the navy approximates the board of directors of a manufacturing concern. Its duties include the collection of information respecting foreign navies, their bases in time of war, and the theater of action in which they will move. This information will permit an appreciation of the aims and purposes of those navies, and a comparison of their strength with that which we will be able to




Photograph by Henry Hoyt Moore

HON. WILLIAM H. MOODY

Secretary of the Navy since May 1, 1902

muster against each or several of them. Based upon it, comprehensive plans can be prepared for the most effective operations by our navy and the utilization of auxiliary forces such as the naval militia and reserves, and coöperation with the army. The formulation of these plans and their execution in time of peace under the simulated conditions of war will train officers and men and prepare them to grapple with hostile situations when they arise.

After the war with Spain, Captain H. C. Taylor, now chief of the Bureau of Navigation, who had given long and diligent study to the plan, and is to be credited with its adoption, submitted to me a memorandum on a general staff for the navy. This memorandum pointed out the value and purpose of the general staff, much as stated above. The navy was not quite ready for such a comprehensive change as would occur in case of the adoption of the full general staff system, though it had been a subject of discussion for many years. The department did not see its way clear to go further than to organize what is designated as the General Board, with the admiral of the navy as its president, and the whole thing under the direct supervision of the Secretary. This board meets often, and at times consults with the commanders-



in-chief of the various squadrons, especially the North Atlantic, which practices the war plans which the board devises. The work promises well, and tends to keep the navy in full preparation for war, although there is also a tendency in the board to seek undue control and secure legislation which would really supplant the authority of the Secretary. This would fundamentally upset our governmental administrative system, and would also result in unlimited expense.

In the navy a system of administration so compact and yet so elastic that jealousies and friction will be minimized and the most effective coöperation obtained is always the desideratum. What the navy has accomplished must be attributed in large measure to the strength and character of its administrative and fighting officers. They have done splendid work, and they will do better yet. They are zealous, full of ability, honesty, force, and full, of course, of human nature. With these qualities the naval administrative organization is tending still more, as fast as it can, towards a system which will harmoniously labor for only one aim and purpose — the honor and safety of the country.

V

PREPARING FOR THE WAR WITH SPAIN

CUBA projected a sinister shadow across the foreign relations of the United States at the time when William McKinley was inaugurated President, March 4, 1897. Rebellion had raged in the island for years. The sound of the crack of its rifles and the swish of its machetes reached across the sea and grew more and more audible in the ears of the great Republic which for more than a century has been the ideal of freedom to all oppressed people.

Throughout the United States were manifested deep sympathy for the insurgents and a general wish for their success in their struggle. This feeling was intensified by the inhumane and barbarous methods of warfare employed by Spain to crush the revolt, and by the injury to American citizens and their industrial and commercial interests attendant upon the destructive operations of both insurgents and Spaniards. Responding to the loudly expressed demand of the people for some action on our part, Pre-

sident Cleveland, on April 4, 1896, tendered to Spain his good offices for the pacification of the island. The national pride of the Castilians in the integrity of their possessions rejected the offer. The note of the United States, however, had hardly reached the Spanish government before our House of Representatives, answering the national insistence, concurred, by an almost unanimous vote, in a Senate resolution recognizing the belligerency of the republic of Cuba. As they lacked the attributes of belligerents, President Cleveland declined to grant the insurgents recognition of belligerency. When President McKinley entered the White House, he found the nation enthusiastic in the cause of Free Cuba, and the Congress feverishly seeking a means to further it.

With that infinite tact and diplomacy characteristic of President McKinley, he immediately addressed himself to the task of holding the people and their representatives in check, and at the same time accomplishing by negotiation the restoration of peace in disturbed Cuba under conditions that would satisfy the just aspirations of the fighting patriots. He initiated his foreign policy with a declaration of amity toward all nations, which perhaps contributed to cause Spain to listen more considerately to the pro-



Photograph by E. Muller


WIG-WAG DRILL BY THE SIGNAL CORPS



posals submitted by John Sherman, then Secretary of State. The inaugural address of the President contained this statement, "War should never be entered upon until every agency of peace has failed; peace is preferable to war in almost every contingency."

Judicious as were these words, they yet failed to restrain the Senate, and that body, in the extra session called to enact the tariff bill, passed a joint resolution in behalf of Cuban independence. The Republican House, less headstrong than the Senate, stood by the President, and, in spite of public clamor, refused to take action which at once would have precipitated war and which certainly would have gravely embarrassed the diplomatic correspondence then pending.

Looking back over the negotiations conducted with Spain, one cannot but remark the high plane upon which they were placed ; how McKinley made humanity and civilization, with protection of American interests, the cardinal principles of his policy. In dealing with the Cuban question no selfish desire for territorial aggrandizement affected the treatment he gave it. Spain was sovereign in Cuba; her rights as sovereign must be respected. The obligation which we, as a friendly nation, owed to her, no less than the necessity of preventing the reproach



that we were assisting the insurrection, led President Cleveland to establish an extensive marine patrol of our Atlantic and Gulf coasts. The same reasons actuated President McKinley in continuing it. Filibustering expeditions reached Cuba, it is true, but, annoyed as Spain was, she found herself unable to substantiate the claim that the United States failed to observe that "due diligence" which international law requires of a neutral.

The revolution, known as the Ten Years' War, which began in Cuba in 1868, was brought to a close in 1878 only by the exhaustion of Spain and her rebellious subjects. When President McKinley and his cabinet began the study of the Cuban question, the conclusion was quickly reached that a policy of exhaustion had been adopted alike by each party to the later conflict, the one to vindicate its sovereignty, the other to achieve independence. Spain had sought to crush the rebellion in its incipiency by quartering two hundred and fifty thousand men on the island. The effort was futile. Acquainted with the soil, acclimated and hardy, the Cuban volunteer demonstrated that he was a match for the soldier of the Peninsula. The sword proving ineffectual to suppress the insurrection, Spain resorted to the blunter weapon of starvation.

The rural folk were compelled to abandon their homes. Males too weak or too old to have joined the insurgents were herded with women in camps of concentration where lack of food and unsanitary surroundings begot frightful mortality. A conservative estimate of the result of this method of conducting war has been put at half a million deaths. The country, rid of its residents, was laid waste by the torch. Determination to make the war expensive to Spain caused the insurgents to vie with her soldiers in the work of devastation. The island, upon which nature lavishes her richest bounty, was transformed into a smoldering desert in which want and misery stalked. Years of work and of American capital and industry had been necessary to lift Cuba from the enfeebled condition caused by the drain of the Ten Years' War; the revolution of 1895 was forcing it back to the unhappy state of 1878.

The unfortunate situation of the Cuban people and of American interests and investments in the island provoked the President to action. In the name of humanity and civilization, an earnest protest was offered against the cruel tactics enforced, and demand was made that the war be conducted in accord with the military code of civilized nations. Small concessions were

made to the just expressions of our horror, but the policy of concentration was only completely abandoned under the spur of our indignation. The right to care for its own is an inherent right of every nation. President McKinley obtained from Congress an appropriation for the relief of American citizens in Cuba brought to destitution and sickness by the devastation policy pursued in the island. This money, judiciously expended, succored many who were starving. The good it wrought was an indication of the greater good which could be accomplished by affording relief to the victims of the reconcentration camps. On December 24, 1897, the eve of the birth of the Master who taught the blessed lesson of charity, President McKinley appealed to the American people to give of their plenty to the suffering Cubans. The response was generous. His own personal contribution, of which few knew, was far beyond his means to give. Distribution of the money and supplies collected caused immediate alleviation of distress, and thousands were saved from death. The President's action was humane in its conception and execution, as it was also specially characteristic of his own generous nature, but it was also internationally significant, for it marked the beginning of American intervention in Cuba.



Photograph by J. E. Purdy & Co.

REAR-ADMIRAL FREDERICK RODGERS

President of the Board for inspecting newly acquired war-ships during the war



Temporary amelioration of the condition of the Cuban sufferers was the immediate object of the presidential appeal for contributions for their sustenance. Eradication of the evils in the political system of Cuba, which made such a condition possible, was the only remedy which could prevent its return. Moreover, the United States owed it to itself and to its people to insist upon the termination of a situation which was productive of disaster to American capital, industry, and commerce, which caused constant irritation and disturbance of domestic, social, and business affairs, and which menaced the health of the nation through the danger of the introduction of infectious diseases from the reconcentration camps of the island. These obligations were far more pressing upon the President than, and in fact superseded, the obligation to respect the sovereignty of Spain. The first step in their observance was intrusted to General Stewart L. Woodford, of New York, who was appointed Minister to Spain. On September 18, 1897, General Woodford tendered to the Madrid government, on behalf of the President, the most kindly offices of the United States. This offer was couched in language decidedly more emphatic than that employed by Secretary Olney seventeen months before. "I cannot disguise the gravity

of the situation," General Woodford said, "nor conceal the conviction of the President that, should his present effort be fruitless, his duty to his countrymen will necessitate an early decision as to the course of action which the time and the transcendent emergency may demand." This was practically the text of the instruction given to General Woodford before his departure for his post, and carefully considered by the President and his cabinet during the hot summer days of the preceding July.

Spain suffered a cabinet crisis eleven days after the presentation of the American note, and a new Ministry was formed, with the Liberal Señor Sagasta as its president. Sagasta appreciated the power of the United States and the temper of our people. The note of General Woodford, our able Minister to Spain, was answered by the announcement that an autonomist government would be established in the island. The innovation was one that to the President and his cabinet indicated a hopeful change of policy on the part of the Spanish Crown. But though autonomy was established in Cuba within limited areas and with evidence of good faith on the part of Spain, it promptly developed its insufficiency to restore peace to the belligerent island. Those loyal to Spain derided it; the insurgents contemptuously refused to accept it.

Americans must review these negotiations with a feeling of satisfaction, for they clearly show that every opportunity and ample time were given to Spain to meet the demands of our President, and to effect a settlement honorable and right to herself and her rebellious subjects. During the consideration of the notes exchanged, I was often struck by the concern manifested by President McKinley and his advisers of the cabinet to be considerate of the susceptibilities of the Spanish people, and at the same time to attain the one object in view—the permanent pacification of Cuba. It was of vital importance that the Navy Department should be advised of every development in the negotiations, as the maintenance of the naval anti-filibustering patrol was in its charge, the protection of American life and property in foreign lands was the first duty of our men-of-war, and there was, finally, the probability that war — especially involving the navy — might be the ultimate result.

His conscientious view of the situation had deterred President Cleveland from sending a man-of-war to Cuban waters, though consular officers had not failed to call attention to the advisability of such action. American citizens had been arbitrarily thrown into jail, and one, Dr. Ricardo Ruiz, died in prison under circum-

stances which indicated that he had been foully murdered. Energetic representations made by the State Department during the Cleveland and the first few months of the McKinley administration resulted in the release of all Americans confined in Cuban prisons. Nevertheless, General Fitzhugh Lee, our consul-general in Havana during both administrations, found his representations in behalf of American property and commercial interests hampered by the absence of a naval force, and the known determination of the prior administration not to order a war-ship to Cuban waters. In the first meetings of President McKinley's cabinet consideration was given to the suggestion to dispatch a man-of-war to Havana. But because it was desirable not to arouse the suspicion that the United States was applying pressure to Spain to compel acceptance of the President's proposals for the termination of the insurrection, it was decided to defer such action. Time, however, only accentuated the gravity of the Cuban situation, and there were indications that Havana might become the scene of disturbances anti-American in character. Such demonstrations, especially if directed against the American consulate, could only have had consequences disastrous to the peace of the two nations. As a measure of precaution, there-



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THE OLD BATTLE-SHIP MAINE



fore, President McKinley, in October of 1897, decided that a war-ship ought to be stationed within a short distance of the Cuban capital. Instructions were accordingly given to the second-class battle-ship Maine to proceed to Port Royal, S. C. Early in December she was ordered to Key West, with instructions to open communication with General Lee, proceed to Havana at such time as, on notice from him, conditions in that city should warrant, and to grant an asylum to American citizens should they appear to be in danger. The wisdom of this action was proven by disturbances which occurred in Havana on January 12, 1898, as a result of the hostility of the Spanish royalists there to the plan of an autonomic government. General Lee cabled to the State Department that uncertainty existed whether the Spanish captain-general could control the situation, and advised that ships be prepared to move promptly. Obviously, there was but one thing to do. Through Minister Woodford and General Lee the Spanish authorities had been advised of the purpose of the United States to have its war-ships resume friendly visits to Cuban ports. Carrying out this decision, the Maine went to Havana, and the cruiser Montgomery to Santiago de Cuba and Matanzas.

Spain affected to see an ulterior motive in this action, and declared that the presence of American war-ships would obstruct autonomy and cause disorder, but responded to the announcement of the purpose to dispatch war-vessels to Cuban waters by declaring her appreciation of the proposed visits, and stating that she would return the courtesy by sending Spanish ships to the principal ports of the United States.

Several reasons were responsible for the selecting of the *Maine* for service at Havana. She was a second-class battle-ship, really an armored cruiser, sufficiently powerful to impress the Spanish troops and loyalists, and at the same time capable of making a good defense in case of an attack by shore batteries and their supporting ships in the harbor. She was under an officer in whom the department had confidence — Captain Charles D. Sigsbee, who had been ordered to command her in April, 1897. A few months before the *Maine* was sent to Key West, Captain Sigsbee had shown good judgment in avoiding in the East River, New York, a collision with an excursion steamer loaded with women and children. Captain Sigsbee's conduct in Havana demonstrated that the department had justly estimated his character. He was as punctilious as the Spaniards in official courtesies. He dip-

lomatically refrained from involving himself in Cuban politics. At the same time, he served as the eyes and ears of the Navy Department, and transmitted to it all the information he could collect concerning political and military conditions in the island.

When the *Maine* was ordered to Havana, it was not intended that she should remain for a long time. In the judgment of the medical officers of the department, sanitary reasons forbade a protracted stay. Political necessity demanded, however, that the advantage gained by the dispatch of a vessel should not be lost by her immediate withdrawal. General Lee expressed the opinion that conditions required the presence of a war-ship; that the retirement of the *Maine* and neglect to order another ship in her place would aggravate them, and that to counteract the Spanish estimate of our navy a first-class battleship should be sent in case the *Maine* were relieved, and with it a torpedo-boat to preserve communication with the commander-in-chief of the North Atlantic Squadron. General Lee's views prevailed. The *Maine* remained in Havana harbor, and the torpedo-boat *Cushing* conveyed dispatches to and from her to the commander-in-chief at Key West.

While representatives of the United States,

diplomatic, consular, and naval, were according to Spain the courtesy due to a friendly nation, the envoy of the Spanish government in Washington, Enrique Dupuy de Lome, committed an unfortunate breach of etiquette and propriety. In a letter to a friend in Havana the Minister referred to the President in coarse and abusive terms. The letter, brought to light, was submitted to the State Department. The usefulness of its author ceased at once. His recall was demanded, but before the demand was presented he anticipated it by tendering his resignation. Desire to preserve its agent from humiliation prompted immediate acceptance of the resignation, but the Spanish government subsequently expressed regret and disclaimed the views expressed in the objectionable missive. Nevertheless, unjustifiable criticism of our President by the representative of Spain and the revelation he had made of Spanish insincerity aroused indignation and distrust, and added further irritation to a situation already brimful of dangerous possibilities.

The widening rift in the relations between the United States and Spain seemed to have no effect upon the treatment of the Maine by the Spanish authorities. Captain Sigsbee reported an evident inclination on the part of Spanish officials to limit

their relations with him to those prescribed by official etiquette, but he experienced no discourtesy, and the Maine's arrival and stay produced no appreciable excitement. A few days later the vessel was made fast to the buoy designated by the captain of the port, from which she never moved. Captain Sigsbee, to show his good relations with the island, attended a bull-fight with some of his officers, but while returning from the exhibition a small printed sheet vehemently protesting against the visit of the Maine was placed in his hand. The following is a paragraph: "And, finally, these Yankee pigs, who meddle with our affairs, humiliate us in the last degree, and, for a still greater taunt, order to us a man-of-war of their rotten squadron, after insulting us in their newspapers with articles sent from our own home."

As circulars containing unexecuted threats against the life of General Lee had been frequently received by that officer, no attention was paid by Captain Sigsbee to the paper delivered to him; nor was it possible of belief that Spain, with many noble traditions, could descend to the depth of authorizing the destruction of the ship of another nation, with which she was still at peace, lying peacefully within one of her harbors. Captain Sigsbee had naturally taken precautions

for the care and safety of his command, without making his action offensively obvious to the Spanish authorities, but his procedure related entirely to internal administration and could not extend to external surveillance. Spain's international duty required her to protect the *Maine* from outside injury. The same duty imposed upon the United States the preservation from harm of the Spanish cruiser, the *Vizcaya*, during her visit to New York. Though the *Vizcaya* lay in New York harbor immediately after the destruction of the *Maine*, she rested in perfect security, guarded — unnecessarily — by tugs and launches, and she sailed undamaged to ultimate destruction in battle on the south shore of Cuba.

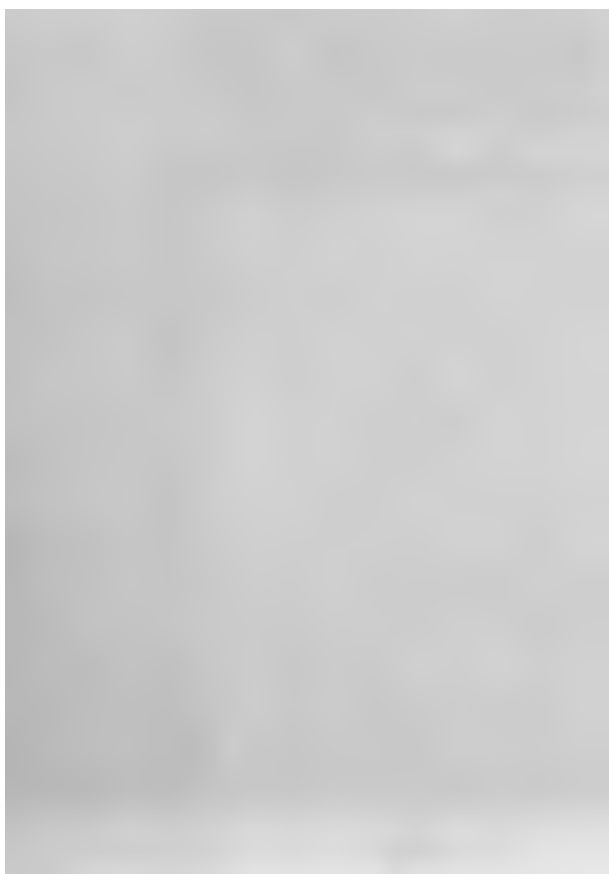
The *Maine* was blown up at forty minutes past nine in the evening of February 15, 1898. Two officers and two hundred and sixty-four enlisted men lost their lives in this catastrophe. I was awakened about two o'clock on the morning of February 16, by a dispatch from Captain Sigsbee — shall I ever forget it, or the gentle hand that brought it? — briefly announcing the appalling disaster. It was a supreme moment, and that telegram was a spark that fired an explosion of popular feeling throughout the country far more pregnant of death and destruction than the explosion of the *Maine*. The bright representatives of



Photograph by Hollinger

CAPTAIN CHARLES DWIGHT SIGSBEE

In command of the battle-ship Maine when she was blown up in Havana Harbor, and of the cruiser St. Paul during the war



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the press were at my door, and the news was swift upon the telegraphic wires. Commander Francis W. Dickins, acting chief of the Bureau of Navigation, was at once sent for and directed to notify the President. It was manifest that the loss of the *Maine* would inevitably lead to war, even if it were shown that Spain was innocent of her destruction. Time was necessary, however, to enable completion of our preparations for conflict. From every point of view hasty action was inadvisable. The President desired to give the civilized world no ground for criticising the American Republic. His policy had not changed from that declared eleven months before. He sought to preserve peace, but to be prepared for war in case it was forced upon him. In his dispatch Captain Sigsbee had suggested that "public opinion should be suspended until further report." This advice from the commanding officer of the destroyed vessel was taken by the country — whether correctly or not — to refer to the suspension of its opinion as to the responsibility of Spain for the act, and was followed in that spirit. With admirable poise, but with unrelenting determination to avenge an injury if it had been done them, the people, after the first outburst of horror and indignation, sternly and deliberately awaited the verdict of the naval court of

inquiry which had been ordered to make a full and thorough investigation. Appreciating the grave consequences apt to ensue from its decision, the personnel of the court was selected with the utmost care. Captain William T. Sampson, commanding the battle-ship Iowa, was named as president; Captain French E. Chadwick, commanding, and Lieutenant-Commander W. E. Potter, executive officer of the New York, were appointed members, and Lieutenant-Commander Adolph Marix was ordered as judge advocate. These officers had high professional standing, and the President and his cabinet believed that their findings would be accepted. Captain Sampson had served as chief of the Bureau of Ordnance and as head of the torpedo-station at Newport. He was, therefore, well qualified to determine the question whether an internal or external explosive agent had destroyed the Maine. Prior to assuming command of the New York, Captain Chadwick had occupied the office of chief of the Bureau of Equipment. He was an expert in all matters relating to coal and electricity. Lieutenant-Commander Potter was an officer of technical experience and calm judgment. Lieutenant-Commander Marix had been executive officer of the Maine, and was familiar with the details of her structure and organization.

Conscious of the awful responsibility placed upon her by the destruction in her harbor of a friendly man-of-war, particularly one flying the flag of the United States, Spain at once gave assurance of sincere sympathy for the American nation. The Queen Regent, whose attitude seems always to have been considerate, personally expressed profound horror and regret. The Spanish government conveyed its condolence through our Minister Woodford at Madrid, and its chargé d'affaires at Washington. Governor-General Blanco and the Ayuntamiento of Havana declared their grief. From every nation and from every quarter messages of sorrow were received. The world was shocked by the disaster, and was prepared to hold the authors of it, if they could be discovered, to strict accountability. Spain's situation was delicate. Her honor and her position in the family of nations were jeopardized by the investigation which the United States had set on foot. She proposed that a joint inquiry be made. The adoption of this proposal was impracticable. Spanish officers then sought to throw obstacles in the way of our independent inquiry. A sharp protest ended this procedure. The wreck of the *Maine* was closely inspected by wreckers and divers and United States naval officers. Their discoveries

and the evidence of survivors of the *Maine* and of persons who witnessed the explosion were heard by the court. On March 21 Captain Sampson and his associates submitted their report to the department. They found that the *Maine* had been destroyed by the explosion of a submarine mine, but responsibility for her destruction was not specifically placed upon any person or persons. Unable to obtain a joint investigation, Spain ordered an independent one, which ascribed the catastrophe to internal causes. Spain subsequently suggested that an international court be convened to inquire into the *Maine's* destruction. The United States accepted neither this suggestion nor the Spanish findings. Immediately upon the receipt of the report of the Sampson court, Spain was advised of its character, and informed that the President did not permit himself to doubt that her sense of justice would dictate a course of action suggested by honor and the friendly relations of the two governments. However, the soon-following declaration of war terminated all negotiations in regard to the *Maine*. The mystery of her loss yet remains to be solved, but the facts will some day come to light, and it will probably be found that, so far as the Spanish government itself was concerned, it was innocent of the design, though it is possible that some

of its subordinates or possibly some insurgent Cuban foreseeing the effect, may have been responsible for the fact.

The destruction of the *Maine* severely aggravated the situation and precipitated the crisis. The certainty that war was inevitable in case Spain failed to grant generous concessions to the insurgents had caused the Navy Department for some time to maintain the navy on a semi-war footing. The measures to prepare the service for conflict were, as far as possible, of a nature not calculated to arouse public anxiety. Premature disclosure might have jeopardized pending negotiations; and it is a fact that unwise publications materially hampered the President and the department in dealing with the Cuban question. As quietly, however, as it could be done, preparations were made. Ships under construction were completed and immediately commissioned; those undergoing repairs were finished and added to the fleet. The several squadrons, particularly those of the North Atlantic and Asiatic stations, were required to engage in evolutions and target practice, so that, when confronted with an enemy, they would be able to maneuver as a unit, and shoot with judgment, rapidity, and precision. Plans of operations against Spain were devised, and all information

regarding the Spanish navy that could be obtained was collected and considered in its various relations to hypothetical war situations.

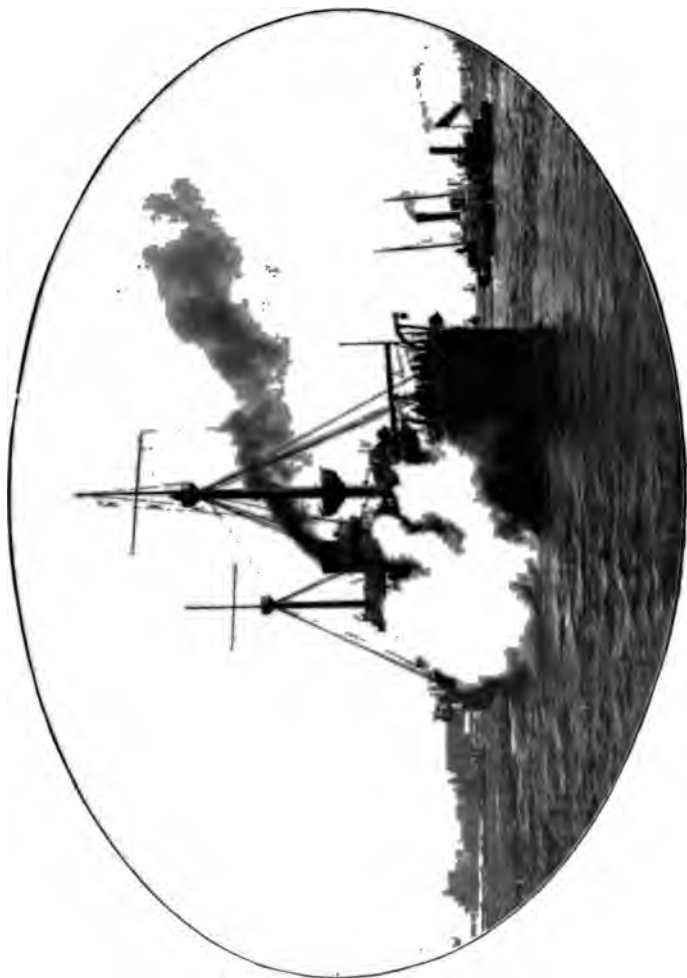
With the further development of the war cloud our preparations assumed larger proportions. Beginning with January 11, 1898, instructions were cabled to commanders-in-chief of the several squadrons to retain in service men whose terms of enlistment were about to expire. The North Atlantic Squadron and a torpedo-boat flotilla were sent to the Florida drill-grounds. The gunboat *Helena*, *en route* to the Asiatic Station, was stopped at the Azores, subsequently was ordered to join at Lisbon the *San Francisco* and *Bancroft*, comprising the European Squadron, and, after the destruction of the *Maine*, was brought to Key West. The *Bancroft* accompanied the *Helena* to the United States, putting in at Norfolk for repairs, and again saluted her on the Cuban blockade. The South Atlantic Squadron, consisting of the *Cincinnati* and the *Castine*, which were at Montevideo, was advised on January 17 that affairs were much disturbed in Cuba, and that it should, without causing comment, proceed to Para, Brazil. Two days after the destruction of the *Maine* the squadron was directed to proceed north from Para, and reached Key West on March 26. The *Wilmington*, which

had been assigned to the South Atlantic Station, was caught by cable at Guadeloupe, and diverted to La Guayra. She dropped anchor in Key West harbor on the same day on which the Cincinnati and Castine arrived. The Annapolis, which was cruising in the West Indies, was also ordered to Key West. In this way the department mobilized within ninety miles of Cuba a fleet ready, upon declaration of hostilities, to establish a blockade of the principal ports of the island, and to do battle with the hostile squadron of the Peninsular kingdom whenever it should appear.

In preparing for war the department did not confine its attention to the Atlantic Ocean. Commodore George Dewey, commander-in-chief of the Asiatic Station, was directed to assemble his squadron, with the exception of the unseaworthy Monocacy, at Hongkong. The Olympia, his flagship, had been ordered home for repairs, but this order was revoked as the certainty of war loomed upon the horizon. The cruiser Baltimore was at Honolulu. The Mohican, at Mare Island, was ordered to convey to the Baltimore a large quantity of ammunition, and after its transfer the Baltimore started at once to join Commodore Dewey at Hongkong, who was thus amply supplied with ammunition from the beginning. The battle-ship Oregon, which was at Bremerton,

Washington, early in March, was directed to proceed to San Francisco and receive ammunition. On March 12 she was ordered to prepare for a long cruise, and on March 19 she started on that voyage back around the Horn which will be famous so long as the American nation takes pride in gallant deeds. The gunboat Marietta, which was at San José de Guatemala, was ordered to precede the Oregon and arrange for coal and otherwise facilitate the battle-ship's passage to Key West.

Thus were the regular squadrons mobilized and augmented. New squadrons were formed. The armored cruiser Brooklyn, which was on detached service in the Caribbean Sea when the Maine was destroyed, was ordered from La Guayra to Hampton Roads, where were assembled the battle-ship Massachusetts, the second-class battle-ship Texas, and the commerce-destroyers Minneapolis and Columbia. These ships comprised the Flying Squadron which was held in readiness to defend any point on the American coast or to assail a port of Peninsular Spain. Though the department felt assured that the West Indies were to be the theater of military operations, some of the Atlantic coast cities and towns were nervously excited over the possibility of an attack by a Spanish man-of-war, and to allay alarm the



Photograph by E. Muller

BATTLE-SHIP TEXAS

Northern Patrol Squadron, under Commodore Howell, was organized on April 20. The San Francisco, brought home from Europe, was made the flagship of this squadron, and attached to the flag were the cruisers *Prairie*, *Dixie*, *Yankee*, and *Yosemite*. The *Columbia* and *Minneapolis* and two auxiliary cruisers, *Badger* and *Southery*, were also from time to time attached to this squadron. It turned out that there was never any real need for its organization, although it patrolled the coast northward, and it was finally disbanded and the vessels comprising it assigned to more pressing duty.

The department early appreciated that the work cut out for the navy was too comprehensive for it to perform without considerable augmentation. The Secretary had exhausted his legal authority in enlisting men and apprentices over and above the quota allowed by law. There was not sufficient money, however, with which there was authority to buy material. On March 9 Congress, therefore, gave to Spain, and other powers not inclined to regard our policy with friendly eyes, a striking indication of our potential strength. It appropriated \$50,000,000 of the ample funds in the Treasury "for the national defense." To show the confidence of the people, irrespective of political affiliation, in our

President, this appropriation was placed at his disposal, to be spent in his discretion — which discretion he extended to his Secretaries. The President made allotments to the Navy Department which, in the aggregate, amounted to ✓ \$29,973,274.22, all of which, with the exception of \$618,447.17, was expended by it. Congress subsequently appropriated \$25,000,000 for an emergency fund to meet unforeseen contingencies, and \$3,000,000 for the organization and enrollment of the United States auxiliary force. There was thus given to the Navy Department, for use at its discretion in strengthening the navy, the sum of \$57,973,274.22. Of this amount there was ✓ expended on November 15, 1898, \$25,056,131.21 — more than the whole emergency fund, which unexpended balance, of course, remained in the Treasury.

All the money disbursed by the department was honestly spent and every purchase made in good faith. Even before Congress granted its appropriation for national defense, the department had given consideration to the question of purchasing foreign men-of-war. The navy list of every nation likely to sell had been scanned. Reports were obtained in regard to war-ships nearing completion in the private shipyards of Europe. Captain W. H. Brownson had been

sent abroad to pursue inquiry and initiate negotiations of purchase. Mr. Charles R. Flint, of New York City, through his large maritime connections, was also helpful. The department swarmed with agents of foreign firms anxious to make sales to the United States. Sight was not lost of the fact that Spain, too, was anxious to buy, and that it was more desirable that we should pay a high price for a ship than to permit it to be incorporated into her service. As a result of the efforts of the department and its agents, two protected cruisers, the Amazonas and the Abreu, both building at Elswick, England, for Brazil, also the gunboat Diogenes, belonging to the Thames Iron Works, of England, and two torpedo-boats, were purchased. These vessels were christened the Albany, New Orleans, Topeka, Manly, and Somers, respectively. The New Orleans and Topeka did excellent service in Cuban waters during the war; the Manly was attached to the auxiliary defense squadron at New York; the Albany was retained in England, not having been completed, until after the war.

The difficulty experienced in adding war-ships to the navy when the country was on the eve of hostilities shows the danger and folly of a policy which trusts to the last moment to make preparation. It was soon evi-

dent that foreign governments were not disposed to bring upon themselves the protest of Spain by selling vessels to the United States for hostile use against her, and practically the only power which served us in this respect was Brazil, which authorized the sale to us of the Amazonas and the Abreu. In view of the inability largely to add regular men-of-war to the service, it became necessary to improvise war-vessels. Ninety-seven merchantmen were purchased and transformed into auxiliary cruisers, gunboats, and colliers; five vessels, one the City of Pekin of the Pacific Mail Steamship Company, and four, the St. Paul, St. Louis, New York, and Paris (the latter two renamed the Harvard and the Yale), were chartered from the International Navigation Company; one iceboat and two yachts were loaned to the department, and fifteen revenue cutters, four lighthouse tenders, and two United States Fish Commission vessels were transferred from their especial departments to the Navy Department.

The labor of purchasing vessels devolved to a great extent upon the office of the assistant secretary, and Mr. Roosevelt and Mr. Allen were successively efficient in procuring ships for the service. Several hundred vessels were offered to the department, some at extortionate prices.

Little political pressure was applied to force purchases. Some American owners displayed far more greed than patriotism. Before competition became active, no doubt the department paid a higher price than the vessels would have brought at private sale, and in one or two instances there was rank extortion; but when the honor and safety of the nation were at stake, and time was of the greatest importance, and the ships must be had at any cost, the department could not go without them. Once, however, the need of the department became generally known, competition between ship-owners grew energetic, with the result that vessels were obtained at reasonable prices. All the ships acquired were first inspected by a board of which Captain Frederick Rodgers was president, or by special boards, and the officers comprising them performed their duties with fidelity and care; thus the department was assured by expert report that every vessel purchased was properly built and fitted to perform its part in the war.

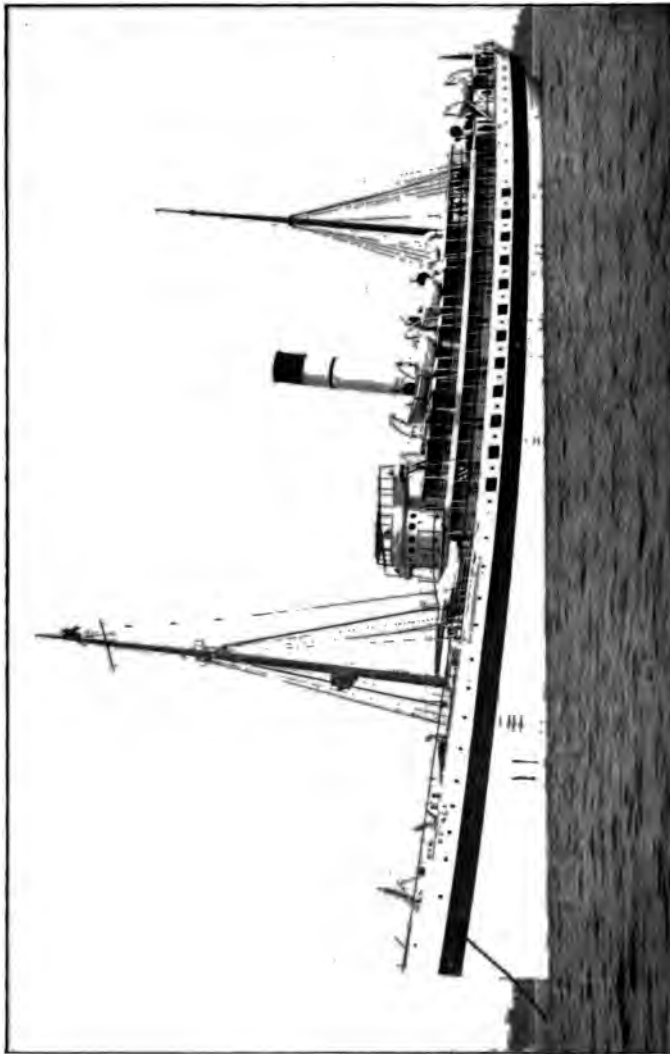
The acquisition of vessels was followed by their transformation into war-ships. The Bureau of Construction and Repair utilized its plants at navy-yards and private shipyards to convert them. The ships were strengthened to with-

stand the shock of discharge of guns, woodwork was ripped out, batteries installed, and they were docked and painted and supplied with proper equipments. The construction plants at five navy-yards, which in January, 1898, employed twenty-two hundred men, furnished work for a maximum of more than six thousand during the war. Few of the vessels purchased had evaporators or distillers, appliances essential to continued service afloat, or proper outfits of engineering stores and tools, and many of them required overhauling in their steam departments. The Bureau of Steam Engineering performed this work satisfactorily and expeditiously. One novelty which Rear-Admiral Melville, the engineer-in-chief, introduced into the service was a floating steam engineering plant—a floating blacksmith shop. The vessel so transformed I named the Vulcan, and her service in North Atlantic waters showed the great value of having such an establishment attached to a fleet engaged in offensive operations. The Bureau of Equipment supplied auxiliary vessels with complete outfits of rigging, canvas, galleys and cooking utensils, boat supplies, anchors, chains, electric supplies, searchlights, binnacles, compasses, sextants, chronometers, charts, and other instru-

ments and appliances of navigation, sails, awnings, hammocks, bags, and many other articles. The best indication of the quantity of supplies it distributed is furnished by the report made on the distribution charts. Up to the time when the preparations for war began, the quarterly output of navigation charts in time of peace rarely exceeded 6600. During the Spanish emergency the division of Chart Construction issued 43,910 copies of charts. The Bureau of Equipment was also charged with the purchase and transportation of coal. Rear-Admiral Bradford, chief of this bureau, urged before the declaration of war that coaling-stations be established in the vicinity of the passages about the Antilles, but this proved impossible, and the most that could be done was to direct the Bureau of Yards and Docks to construct a station at Dry Tortugas, off the coast of Florida, capable of storing twenty thousand tons of coal, which, however, was not ready for service during the war. Unable to establish coaling-depots, the department turned to the coasting-fleet, which submitted numerous tenders for the transportation of coal. When war was declared but one firm was prepared to carry out its proposal. Coal was vital to the success of naval operations, and steamers were purchased and

transformed into colliers and armed and manned with naval crews. As indicating the state of efficiency reached in the matter of coal transportation, attention may be called to the fact that on one occasion forty thousand tons of coal were afloat at Hampton Roads ready to be sent at an hour's notice to any point the department should designate. The department was also confronted with the problem of supplying the ships with fresh water for steaming purposes, and it was necessary to purchase water, though the effort was made to meet this want by converting large steamers into distillery and tank ships.

Five hundred and seventy-six guns were placed on board the vessels transformed into men-of-war. Besides purchasing many of these guns, the Bureau of Ordnance contracted for and obtained prompt deliveries of large quantities of powder, projectiles of all kinds and calibers, fixed ammunition, and small arms. To meet the demands of the service, the contractors were compelled to increase their plants and work without intermission. As a result of several years of study and development, a purely smokeless powder, combining the qualities of safety, permanency, and strength, was developed just prior to the war with Spain. The department, however, was prevented by lack of



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HOSPITAL-SHIP SOLACE



time from supplying all its vessels with a complete outfit of this. In view of the fact that one gun using brown powder would with its smoke have nullified the effect of another of the same ship employing smokeless powder, it was necessary to move cautiously. Consequently, a few vessels only were given this kind of ammunition. The magazines of every ship in the service are now filled with it. Just prior to and during the war the Bureau of Ordnance prepared gun-cotton mines and mining outfit, and launching-tubes for seventy-five torpedo-boats were manufactured.

The Bureau of Medicine and Surgery made preparations for putting the medical departments of the ships in condition to care for the sick and wounded; and the hospital-ship *Solace*, under the surgeon-general, was a creation of mercy to those who suffered from war and disease.

The Bureau of Supplies and Accounts, which was charged with making all purchases, upon requisition from the different bureaus, provided provisions and clothing for the men, and provided them with clockwork promptness. The lack of docking facilities, a matter of especial concern, was partially met for small ships by the purchase of the floating dock.

In other words, the splendid preparedness of our navy was due, as should never be forgotten, to the chiefs of bureaus who were charged with that duty in their respective lines. The attempt to persuade the country to a full appreciation of their desert in this respect is almost hopeless, for it rarely takes the pains to go beyond the picturesque and conspicuous, or to recognize in the plodding official at his desk and out of his uniform the man who does the work of preparation but shares none of the glory of achievement.

What has been stated shows that the Navy Department was buzzing with the activity of a beehive during the few weeks between the destruction of the Maine and the beginning of war with Spain, and this activity continued throughout hostilities. There has not yet been mentioned, however, one of the most important of the many important problems which confronted the department. That was the increase of the commissioned and enlisted forces of the navy to man the greatly augmented material. Additions to the crews of regular men-of-war were required. Crews were needed for the auxiliary navy and for vessels assigned to the defense of the coast other than those of the seagoing patrol squadron. These ships included monitors

of the Civil War, converted ferry-boats, yachts, and tugs. Signalmen were required to operate the coast signal-stations. At the time of the destruction of the *Maine*, the commissioned sea-going force of the navy consisted of 1232 officers, distributed among the line, engineer, medical, and pay corps, and including chaplains and cadets undergoing their final cruise before graduation. The authorized enlisted force, including men and apprentices, numbered 11,750. Eight hundred and fifty-six volunteer or acting officers were appointed during the war, and there were innumerable applications of bright, eager, experienced men from all over the country, making the total commissioned force 2088, while the enlisted strength reached a maximum of 24,123. More than 4200 men were mustered in from naval militia organizations; while these had not had extended training and experience, their intelligence and education enabled them to make themselves quickly proficient in their duties, especially when associated with trained men-of-warsmen. The *St. Paul*, *St. Louis*, *Harvard*, and *Yale* were taken into the service on the condition that their crews should accompany them. They were placed under command of naval officers. The suggestion was made that some of the older organizations of the naval

militia were competent to handle men-of-war, and Massachusetts, New York, Maryland, and Michigan were called upon to furnish officers and men for the *Prairie*, *Yankee*, *Dixie*, and *Yosemite*. The promptness with which the call was answered is shown by the fact that the New York naval brigade reported, uniformed, armed, equipped, and ready for duty, within six hours, and the Massachusetts naval brigade in similar condition within eight hours. Many of the organizations of other States, such as Illinois and others, were willing, with very creditable generosity, to be distributed among such ships as needed men.

In January, 1898, organizations of naval militia existed in fifteen States, and aggregated 200 commissioned officers and 3703 petty officers and enlisted men. The department had directed on March 23, 1898, the preparation of a scheme for a "mosquito flotilla" for coast defense, and while only a part of the plan had been worked out when war was declared, it was rapidly carried into execution, and the auxiliary naval force finally comprised forty-one vessels, distributed so as to protect important strategic points of the United States, and to patrol the mine-fields laid in the harbors.

As a part of the system of defense, a board

was formed in October, 1897, to consider the establishment of coast signal-stations. In accordance with the plan as outlined, arrangements for establishing the stations were made early in the following April. They were so complete that within two days after Rear-Admiral Sampson's fleet began the blockade of Cuba, competent quartermasters, signalmen, and telegraph operators from the naval militia organizations started for the points where the stations were to be located, and many had reported their arrival. In two weeks all the stations, save two located at points on the Florida coast difficult of access, had been equipped. These stations during the war, under the direction of Captain John R. Bartlett, then on the retired list, coöperated with those of the Life-saving service, the United States Lighthouse service and Weather Bureau system. By this means the department had constantly on the lookout for suspicious craft a force of 2526 men, most of whom were experienced and provided with exceptional facilities for reporting the appearance of vessels. Though no hostile man-of-war was sighted, yet the value of this system was demonstrated by the promptness with which the battle-ship Oregon was reported off Jupiter Inlet, Florida, after her famous run around the Horn.

Any description of the work of the department in preparation for war would be lacking in an essential particular if reference were not made ✓ to the Naval War Board. Lacking professional experience, and the navy being without a general staff, it was necessary that the Secretary should have the assistance of such a board. Assistant Secretary Roosevelt, Captain A. S. Crowninshield, chief of the Bureau of Navigation, Captain A. S. Barker, and Commander Richardson Clover, chief of Naval Intelligence, were asked to act in that capacity just before the war began; but it was only a few days before Mr. Roosevelt, Captain Barker, and Commander Clover were called to more active service. Thereupon Rear-Admiral Montgomery Sicard and Captain A. T. Mahan, of the retired list, were appointed members with Captain Crowninshield of the Naval War Board, and they acted as such during the war. It was eminently fitted to coördinate the work of the department and the fleet, and to keep a general surveillance over the larger strategical and technical questions which could not be dealt with by the commanders-in-chief of the several squadrons. Rear-Admiral Sicard had commanded the North Atlantic Squadron, and just prior to the war had been compelled, because of ill health, to relinquish this position.

He was thus well acquainted with the peculiarities and capabilities of each ship and the state of efficiency of the entire squadron. Captain Crowninshield, as chief of the Bureau of Navigation, with the rank of admiral, was informed as to the distribution and movements of vessels. Captain Mahan is known as an authority on naval strategy. To my mind the board possessed high intelligence and excellent judgment, and its service was invaluable in connection with the successful conduct of the war.

On April 15, four weeks before the arrival of Admiral Cervera's fleet in the Caribbean Sea, the New Navy was in condition to wage war against Spain. The ships of the service, which for months before had been scattered in all directions, engaged in works of peace, had been mobilized and fully manned and equipped and reinforced by auxiliary vessels. Two strong fleets were stationed at points which insured both the assault of Spain's vital positions and the defense of our own shores. Four days before this state of preparedness was reached, President McKinley remitted the entire Cuban question to Congress. Released from the rein of the Executive, the two houses hastened to act. By the resolution approved April 20, 1898, Spanish withdrawal from Cuba was demanded. On the


following day President McKinley issued instructions for the hostile movement of the fleets which, as a member of Congress and as President, he had aided in bringing into existence. And my telegram went to Acting Admiral Sampson to blockade Cuba at once.

All this time the enthusiasm of the country was at fever-heat. The department was thronged with congressmen and citizens at large. Tenders of service came in from every quarter; contributions of money were made, notably that of \$100,000 by Miss Helen M. Gould. Private yachts were tendered. Officers whose duty held them on shore or at the department pleaded with me with tears in their eyes for transfer on ship-board and to the scene of action afloat. The cabinet was in frequent session, and daily and nightly those of its members who were more closely related to the war were in consultation with President McKinley at the White House. And all the while, with the tremendous responsibilities that lay on him, he kept his poise in serenity of spirit and clearness of judgment.

VI

THE BATTLE OF MANILA BAY

OUTLYING colonies, inadequately defended, are, in time of war, sources of serious weakness to the mother country. This military axiom was never better exemplified than in the case of Spain at the time of her struggle with the United States. The naval strategist saw at a glance that her undoing lay in her possessions in the East and West Indies, and that a campaign in the Peninsula was inadvisable unless control of the sea were first obtained, and that, if attempted, it would be productive of great loss without compensating advantage. On the other hand, destruction of Spanish power in the Philippines, Cuba, and Porto Rico would force the Madrid government to terms. While Continental Europe, unfriendly to our action and policy, would not be disposed to regard with approval an American invasion of the home territory of one of its powers, yet it could not properly question the destruction of Spanish power in the Philippines, Cuba, and Porto Rico,



although the result would be to compel Spain to surrender those insular possessions.

These conclusions caused the Navy Department, in preparing plans for war, to fix primarily on the East and West Indies as theaters of naval operations. Annihilation of the Spanish squadrons in those regions would require the dispatch from Spain of new forces, which, deprived of support at points of destination and embarrassed by voyages far distant from their initial bases, could be met and overcome by superior commands. Observance of a policy predicated upon these deductions assured complete defeat of the enemy, protection of our own shores and commerce, and achievement of the humanitarian purposes of the war,—freedom of Cuba and accordance to its people of the inalienable rights of life, liberty, and the pursuit of happiness.

Thus the campaign adopted by the Navy Department had two main objectives,—the absolute crushing of the Spanish squadron in Philippine waters and the control of the sea in the Atlantic Ocean. Strategical and tactical blunders by the Spanish admiral in the Far East, the demoralized condition of his command, and the promptness, magnificent courage, and high efficiency of the officers and men who fought under the Stars

and Stripes, enabled the attainment of the former object first. The victory gained in Manila Bay was important from a strategical standpoint, but, of far greater consequence, was productive of far-reaching international and territorial results. It must, therefore, take rank as one of the foremost achievements of modern wars. •

Seven hours only were required by the American squadron to place the Philippine Archipelago at the mercy of the United States, and relieve this government of anxiety for the Pacific slope and its trans-Pacific trade. More than seven years, however, had been needed to provide the ships and perfect the personnel which accomplished this result. The men-of-war participating in the actual fighting on that famous 1st of May, 1898, were born of the New Navy, and well they demonstrated their birthright. The flagship was the protected cruiser *Olympia*, of 5800 tons displacement, which had been laid down in San Francisco in 1890. Following her lead were the protected cruiser *Baltimore*, of 4600 tons, built at Philadelphia in 1887-88; the protected cruiser *Raleigh*, of 3217 tons, built at the Norfolk navy-yard between 1889-92; the protected cruiser *Boston*, of 3000 tons, one of the pioneers of the New Navy, the keel of which was laid at Chester, Pa., in 1883; the gunboat

Concord, 1710 tons, contracted for in 1888; and the gunboat Petrel, 892 tons, of date of 1887. Accompanying them were the modern revenue cutter McCulloch, 1400 tons, used as a dispatch-boat, the collier Nanshan, and the supply-ship Zafiro, the last two purchased at Hongkong just before the outbreak of the war.

The possibility of a rupture with Spain existed during the closing year of the administration of President Cleveland, and Secretary Herbert had taken precautionary measures to maintain an effective naval force in Asiatic waters. Examination of the list of vessels on foreign stations in 1898 shows that the fighting ships in the East were the Olympia, Boston, gunboat Machias, and gunboat Yorktown. The Machias and Yorktown required overhauling, and were ordered to return to the United States, but, that there should be no diminution of the strength of the squadron, they were replaced by the Petrel and Concord.

Portentous signs of war caused the department under Mr. Herbert's successor to give the closest study to the number and character of the fleet stationed by Spain in the Philippine Islands. Lieutenant George L. Dyer was appointed naval attaché in Madrid in the summer of 1897, and it was a comparatively easy matter to ascertain

through him the exact number of Spanish ships in the East, and whether dispatch of reinforcements was contemplated; but it was far more difficult to find out the condition of the vessels. As a matter of fact, the department was unable to learn the state of their effectiveness. It knew that the Spanish force comprised the iron cruiser *Reina Cristina*, flagship, of 3520 tons, built at Ferrol, Spain, in 1887; the wooden *Castilla*, 3260 tons, launched at Cadiz in 1881; the iron gunboats *Don Juan de Austria* and *Don Antonio de Ulloa*, 1159 tons each, constructed at Cartagena and Carraca respectively, in 1887; the steel gunboats *Isla de Cuba* and *Isla de Luzon*, 1045 tons, laid down at Elswick, England, in 1886; the *Velasco*, 1152 tons, constructed at Blackwall, England, in 1881; gunboats *Marques del Duero*, 500 tons, and *General Lezo*, 525 tons; surveying-ship *Argos*, 508 tons; and a score of mosquito gunboats. The march of events pointing inevitably to war, Spain made a little attempt to augment her shore defenses, and sent to Manila the *Isla de Mindanao*, one of her large auxiliary ocean liners, heavily laden with guns and other munitions of war.

None of the Spanish vessels in the Philippines was capable of operating at a considerable distance from a well-furnished and protected base,

but, if in effective condition, they comprised, with the shore defenses, a formidable force for the small United States squadron to attack, especially as the latter was certain to have the ports of Asia barred by the institution of unyielding neutrality, and was seven thousand miles from a port where it could hope to obtain assistance. In estimating Spain's strength in the East Indies, therefore, it was necessary to consider the batteries placed at the points at which it was likely her fleet would take station for the battle. A dispute with Germany over the Caroline Islands had threatened war a few years before Spanish-American relations became acute; and to defend her possessions in the Pacific from German assault, Spain installed at Manila and other important points high-powered guns capable of sinking any of the ships of our little squadron. Manila was defended in the fall of 1897 by four 9.5-inch muzzle-loading rifles; four 5.5-inch converted breech-loading rifles, and fifteen 6.3-inch obsolete muzzle-loading bronze rifled guns, distributed in front of and along the medieval wall located on the bay shore of the city. A casemated earthwork of entirely modern character, over which poked the muzzles of two 15-centimeter Ordonnez rifled guns, was built at Sangley Point. A stone redoubt at Cavité and the antiquated Fort San Felipe adjacent were

the sites of three 6.3-inch Armstrong muzzle-loading rifles. The entrance to the Bay of Manila is divided by the island of Corregidor into two channels, one known as the Boca Grande and the other as the Boca Chica. Boca Grande was covered by three 6-inch Armstrong breech-loading rifles, three 12-centimeter breech-loading rifles, and three 16-centimeter Palliser muzzle-loading rifles, and Boca Chica by three 8-inch muzzle-loading Armstrong rifles, three 18-centimeter Palliser muzzle-loading rifles, and two 16-centimeter Hontoria breech-loading rifles. Within twenty-four days the defenses of the entrance of Manila Bay were put in condition for action, and just before the declaration of war the battery at Sangley Point was reinforced by one 14-centimeter breech-loading rifle. Several hulks were sunk in the northwest channel of Subig Bay ; but four 15-centimeter guns sent to defend this harbor lay unmounted when the American squadron arrived.

Every effort was made by our Navy Department to learn the number and caliber of the guns comprising the batteries defending Manila and Subig Bay, and while some information was obtained through our naval attaché, and confidential sources in Madrid and through United States Consul O. F. Williams, who remained in Manila

until forced to leave, it was not sufficiently accurate to be of much value. The condition of the defenses in 1897 was reasonably well known. As war approached, additional guns were placed, but in what numbers and at what positions could not be ascertained. Mines were also reported to have been laid.

" The mistake of underrating the strength of the enemy was not made. It was advisable that our squadron should be superior to that of Spain in order to offset the advantage lent to the latter by the shore batteries. The Olympia completed her tour of duty on the Asiatic Station in the winter of 1897-98, and was ordered to San Francisco for repairs and alterations. Ten days after the destruction of the Maine, these orders were revoked and she was directed to remain in the East. The Raleigh was attached in 1897 to the European Station, which was certain to be abandoned in case of war, and instructions were sent to her in December of that year to join the Asiatic Squadron. The Baltimore was placed in commission in October, 1897, and relieved the Philadelphia as flagship of the Pacific Station. She was destined to remain but a short time on this duty. The department had selected her to replace the Olympia on the Asiatic Station, but in March of 1898 she was ordered to reinforce

that vessel. Besides the additional strength she gave the Asiatic Squadron, her assignment to it was important for another reason. While all of the ships were provided with ammunition sufficient for battle, their magazines contained the allowances of peace. Hostile operations require abundant supplies. The wooden cruiser *Mohican*, at Mare Island, California, was loaded with powder and projectiles and was hurried to Honolulu, where the *Baltimore* was anchored. The transfer of her precious cargo to the *Baltimore* was promptly effected, and on March 25 the *Baltimore* sailed for Hongkong via Yokohama. By utilizing the *Baltimore* instead of a merchant ship for the transportation of the munitions, there was less chance of their capture in case the Spaniards should enterprisingly seek to gain possession of them ; but it was within the bounds of possibility that a bold plan to intercept the cruiser would be attempted, and a feeling of intense anxiety pervaded the White House and Navy Department until news of her safe arrival at Hongkong on April 22 reached the Bureau of Navigation. After the war with Spain, a report gained credence that, in order to provide the Asiatic Squadron with sufficient ammunition to engage the Spanish force, the department had found it necessary to send a special train carry-

ing supplies across the continent to San Francisco, where the freight was transferred to the Mohican. As a matter of fact, with the ammunition brought by the Baltimore the Asiatic Squadron was amply supplied, and did not expend a third of its ammunition at the battle of Manila. As to the railroad train, the only one sent across the continent consisted of fourteen cars, and was assembled at Harrisburg, Pa., on June 30, 1898, almost two months after the battle. The munitions it carried were intended to form a large reserve supply for the Pacific and Asiatic squadrons, there existing at the time some apprehension that Spain might send a fleet from Europe to the Philippines and that Germany might provoke us to war. At no time, however, was any American squadron so short of ammunition that it would have been unable to engage an enemy's fleet.

The last reinforcement given to the Asiatic Squadron comprised the auxiliaries McCulloch, Nanshan, and Zafiro. The McCulloch had been built on the Atlantic coast and was ordered to San Francisco via the Suez Canal to perform revenue cutter service. Under the law authorizing the transfer of revenue cutters to the control of the navy in time of war, she was attached to the Asiatic Squadron, and on April 8 was caught

by cable at Singapore and directed to proceed to Hongkong, avoiding Spanish ports and vessels *en route*. As the Asiatic Squadron had no base nearer than San Francisco, though supplies could have been obtained at Honolulu, then the capital of an independent republic, it was necessary to provide it with a collier and a supply-ship, and the British steamers Nanshan and Zafiro were purchased at Hongkong and loaded with coal and other necessary supplies. On the eve of war the Navy Department was able to make the following comparison of the strength of the naval forces of the United States and Spain in the East: —

	United States.	Spain.
Vessels: Cruisers	4	2
Gunboats	8	11
Mosquito craft	0	25
Armed tonnage	20,619	20,698
Guns in main battery	58	44
Guns in secondary battery	84	81
Broadside discharge main battery guns	8,700	8,000

Afloat, the United States was superior, but Spain was stronger so far as *matériel* was concerned, taking her land and naval forces together. The batteries defending Manila Bay were capable of firing at a single discharge 3750 pounds of metal. It is the testimony of experts that

✓ guns ashore are, by reason of steadiness of platform and protection afforded to the gunners, capable of more effective results than guns installed on men-of-war.

Personnel is largely the deciding factor in naval engagements, and this fact was to be demonstrated in the battle of Manila Bay. The commander-in-chief of the American force was Commodore George Dewey. The selection of Commodore Dewey to command the Asiatic Squadron was made during the fall of 1897. Rear-Admiral A. S. Crowninshield, chief of the Bureau of Navigation, called the attention of the Secretary to the fact that the tours of duty of Rear-Admiral Thomas O. Selfridge, Jr., in command of the European Squadron, and Rear-Admiral Frederick V. McNair, in command of the Asiatic Squadron, would expire within a few months, and that it was advisable to relieve them. The Secretary examined the naval register, and found that there were three officers whose turn for sea had come: Commodore E. O. Matthews, Commodore John A. Howell, and Commodore George Dewey. Commodore Matthews was chief of the Bureau of Yards and Docks, from which place it was not thought desirable to take him; Commodore Howell was commandant of the League Island navy-yard, and Commodore

Dewey was president of the Board of Inspection and Survey. Both had had long service and valuable experience; Howell had reputation as an ordnance expert of marked ability; Dewey had served as chief of the Bureau of Equipment of the Navy Department, and subsequently as a member of the examining and retiring boards, receiving in 1895 his orders to the Board of Inspection and Survey. The Asiatic Squadron, in case of war with Spain, offered the larger probable opportunity for distinction, although the European Squadron was a choice flag command of the navy and included the Spanish waters. I decided to give Dewey the Asiatic and Howell the European Station, and this arrangement, on my submitting it to President McKinley, who had made no suggestion in the matter, and who always left such matters to the Secretary, was approved by him. I remember his simply saying to me, in his characteristically pleasant way, "Are you satisfied that Dewey is a good man for the place and that his head is level?" to which I affirmatively answered. Political or personal influence had nothing to do with his selection, which was entirely my own. Indeed, war was not then—in the fall of 1897—so imminent that there was reason for departing from the routine of making in the usual regular

sequence the selection of the two or three officers whose turn to go to sea had come. A month before war was declared, Commodore Howell was withdrawn from Europe, the European Squadron having been broken up, and was placed in command of the Northern Patrol Squadron, organized to defend the North Atlantic coast; he was subsequently ordered to Cuban waters as commander of the First North Atlantic Squadron.

The orders to Dewey were signed on October 21, 1897, and he was directed to sail for Nagasaki, Japan, and there relieve Rear-Admiral McNair. He gave immediate evidence of the fact that the department was warranted in placing faith in him. As soon as it was definitely decided that he should assume command of the Asiatic Station, he began collecting data in regard to the Spanish forces in the Philippines, and the department assisted him in every possible way. Moreover, before and during the war the department made it a first duty to advise him of every development which would be of interest or importance in the conduct of military operations. Before he sailed, the policy of the administration toward Spain was outlined to him, and he received instructions as to the course to pursue in the contingency of war.

When Dewey assumed command of the Asiatic

Station on January 3, he found there a thoroughly efficient and well-trained force, and the credit for this condition is largely due to Rear-Admiral McNair. When the latter arrived in Washington, he stated that he had turned over to Dewey plans for an attack upon the Spanish forces, which were similar in many respects to those afterwards followed.

Protection of American interests had required the scattering of the ships of the Asiatic Squadron along the Chinese and Korean coasts. Believing the time for action not far distant, orders were cabled to Dewey on February 25 directing him to mobilize his squadron, with the exception of the unseaworthy Monocacy, at Hongkong, and to keep his ships filled with coal. "In the event of declaration of war with Spain," he was advised, "your duty will be to see that the Spanish squadron does not leave Asiatic coast, and then offensive operations in Philippine Islands." Other preliminary orders were issued, including an instruction, cabled on April 7, to land all woodwork and stores not considered necessary for operations, and on April 21 the commander-in-chief was informed that the naval force on the North Atlantic Station was blockading Cuba and that war might be declared at any moment. Commodore Dewey had been active in carrying

out his instructions to prepare for war. Everything had been done that promised increase of the effectiveness of his command. Machinery was examined and repairs made where needed; guns were overhauled; magazines, magazine hoists, signal apparatus, in fact, every little detail which went to make up the complex engines so soon to be put to test, underwent careful and conscientious scrutiny. Arrangements were made with the British authorities to dock the Baltimore immediately upon her appearance in the harbor, and two days after her arrival she was cleaned and coaled and reported ready for war. White is the peace garb of American naval vessels, and so decorated they form splendid targets. To make the ships as inconspicuous as possible, the department ordered that they be painted slate color. Thus clad, they awaited instructions to advance on the Spanish force. Great Britain, under international rules, did not, however, permit them to remain in the harbor. She gave recognition of a state of war by issuing on April 24 her proclamation of neutrality. Dewey at once ordered the Boston, Concord, Petrel, McCulloch, Nanshan, and Zafiro to Mirs Bay, an inlet on the Chinese coast, distant thirty miles from Hongkong, which he had selected as a rendezvous. The Olympia, Baltimore, and



THE LATE CAPTAIN CHARLES V. GRIDLEY

In command of the cruiser Olympia at the battle of Manila Bay



Raleigh took advantage of the twenty-four hours' grace allowed by the proclamation to remain until the expiration of that time. The purpose of their stay was twofold: Commodore Dewey desired to confer with the United States consul at Manila, who was en route to Hongkong on board an overdue steamer, and certain parts of the machinery of the Raleigh were undergoing repairs in a machine-shop ashore. Neither the consul nor the machinery came within the time-limit, as the commodore received from the department the instruction which moved him at once to action. ✓

This instruction was not striking in its originality; in fact, it was simply in line with the programme of procedure which Dewey knew so well. As soon as war was declared it was the unanimous opinion of the department, agreed on by the Secretary, the assistant secretary, and the chief of the Bureau of Navigation, indeed by all who expressed an opinion, that we should strike at once at the Spanish fleet in the Philippines. On Thursday, April 21, I urged this action on President McKinley. He thought it not quite time. But early Sunday forenoon, the 24th, I conferred with him at the White House. So vivid is the picture he presented on that memorable occasion that it has remained in my memory with the distinctness of a first impression. It ✓

The struggle will be short and decisive. The God of Victories will give us one as brilliant and complete as the righteousness and justice of our cause demand. Spain, which counts upon the sympathy of all the nations, will emerge triumphantly from this new test, humiliating and blasting the adventurers from those States that, without cohesion and without a history, offer to humanity only infamous traditions and the ungrateful spectacle of Chambers in which appear united insolence and defamation, cowardice and cynicism.

A squadron manned by foreigners, possessing neither instruction nor discipline, is preparing to come to this archipelago with the ruffianly intention of robbing us of all that means life, honor, and liberty. Pretending to be inspired by a courage of which they are incapable, the North American seamen undertake, as an enterprise capable of realization, the substitution of Protestantism for the Catholic religion you profess, to treat you as tribes refractory to civilization, to take possession of your riches as if they were unacquainted with the rights of property, and to kidnap those persons whom they consider useful to man their ships or to be exploited in agricultural or industrial labor.

Vain designs! Ridiculous boastings!

Your indomitable bravery will suffice to frustrate the attempt to carry them into realization. You will not allow the faith you profess to be made a mock of; impious hands to be placed on the temple of the true God; the images you adore to be thrown down by unbelief. The aggressors shall not profane the tombs of your fathers, they shall not gratify their lustful passions at the cost of your wives' and daughters' honor, or appropriate the property your industry has accumulated as a provision for your old age. No, they shall not perpetrate any of these



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CRUISER RALEIGH



crimes inspired by their wickedness and covetousness, because your valor and patriotism will suffice to punish and abase the people that, claiming to be civilized and cultivated, have exterminated the natives of North America, instead of bringing to them the life of civilization and of progress.

Filipinos, prepare for the struggle, and, united under the glorious Spanish flag, which is ever covered with laurels, let us fight with the conviction that victory will crown our efforts, and to the calls of our enemies let us oppose, with the decision of the Christian and the patriot, the cry of "Viva España."

Your General,

BASILIO AUGUSTIN DAVILA.

MANILA, 23d April, 1898.

"Mr. Dooley" could have written nothing funnier.

Following the reading of this proclamation, the crews were informed that the squadron was bound to Manila, there to "capture or destroy the Spanish fleet." The cheers that resounded and the delight manifested constituted a patriotic reply to the vainglorious utterances of the Spanish officer. It was a spontaneous declaration by the men who served the guns that they would courageously and enthusiastically execute the orders which had been given to their commander-in-chief.

The important problem Dewey was now to solve was the whereabouts of the Spanish fleet. Con-

✓ sul Williams had advised him that it was assembled in Manila Bay, which was defended by additional batteries and was also mined. The obvious strategical course for the Spanish admiral to follow was either to establish his squadron at Subig Bay, from which point he could threaten ✓ the communications of the American commander and make well-calculated dashes upon his ships blockading Manila, or evade him, and force his men-of-war to burn up their coal in fruitless pursuit. Either plan would have required the concentration of the invading force, and would have prevented the dispatch of troops for land operations. Admiral Montojo, commander-in-chief of the Spanish squadron, seems to have had some notion regarding the advisability of establishing his base at Subig Bay. That arm of the sea had for thirteen years been subjected to exhaustive examination by a number of special commissions, and at Olongapo, situated on its eastern shore, the construction of a naval station had begun. It was hardly to be believed that this point had not undergone some measure of effective defense. Dewey had been informed that the Spanish squadron proposed to take position at Subig Bay; and, in fact, that had been the intention of its commander-in-chief. The latter sailed for Subig Bay on April 24, but on arrival found that the modern

guns provided for its shore defense had not been placed. The *Castilla* started to leak, and it became necessary to pack her shaft alley with cement; the *Velasco* was not in condition for offensive work either at Subig or Manila; and the *Ulloa* was anchored by her infirmities at Cavité. The council of Spanish commanders convened at Subig advocated return to Manila because the water there was shallow, and there was more chance of saving life there in case of disaster. This last conclusion shows the demoralization of the Spanish force. Montojo returned to Manila Bay with such speed as could be made by the inefficient ships of his command, and upon arrival placed them under the guns of the land battery, and awaited events.

Possessing little knowledge of the deplorable condition of the Spanish fleet, Dewey intrepidly steamed toward Luzon. The green hills of this island of Spain rose out of the water as dawn was breaking, on April 30. There was no enemy in sight, but the invisible Spanish signalman at Cape Bolinao telegraphed that the Americans had come. Toward Subig Bay Dewey turned the prows of his squadron, and the *Boston* and *Concord*, when a short distance from their destination, were sent ahead to reconnoiter that arm of the sea. Twenty-four hours earlier and the battle

of Manila Bay would have been in history the battle of Subig Bay. But no trace of the Spanish ships was there found. When Dewey learned of the fruitlessness of his search, he stopped his squadron and signaled his captains to repair aboard the flagship. At this conference final plans were adopted for running past the batteries defending the entrance to Manila Bay and attacking the enemy if he had been guilty of the strategical mistake of selecting that harbor as the battle scene.

Crossing the China Sea little attempt was made to screen the movements of the squadron. Forcing the channel into Manila Bay, which was doubtless mined, and certainly defended by heavy guns, demanded the exercise of extraordinary precaution. When tropical night fell, the gleam of a single white light at the stern of each ship, by which the following vessel steered her course, was the only illumination allowed the squadron. Fortune smiled on the boldness of the assailant and aided his enterprise by giving him a night well suited to its achievement. A young moon furnished the little light needed to outline the Boca Grande, as the squadron, its guns loaded and ready for discharge, approached that channel. Across the face of the heavens sped black, thunderous clouds; the lightning flashing from them

brought into sharp relief the headlands which nature had constructed as her defenses of the bay. Near the center of the wide entrance loomed the island of Corregidor, and within half a mile stood the rock El Fraile, a frowning sentinel.

Onward Dewey's vessels steamed, spurning danger, and heedless of mines or guns, which Spanish reports asserted would be potent for defense. With good British charts and relying solely upon American seamanship to navigate the ships, and with the Olympia in the lead, he moved toward El Fraile, ignorant that a formidable battery had been placed there. As the flagship turned in its direction, a Spaniard sighted the white light shining in her stern. Almost at the same instant a sheet of flame shot from the smoke-stack of the McCulloch. Signal lights communicating the news of the presence of the enemy were at once displayed at Mariveles Bay, and a rocket burst on the south shore near Punta Restinga. From the battery at the latter point came the first shot of the war in the East. El Fraile, too, opened fire. The Raleigh, Boston, and McCulloch returned the hostile greeting with more effect, one of their projectiles exploding among the gunners of the Restinga battery and silencing it after it had been in action only three minutes. There was no pause for this exchange,

but the squadron moved on, and in half an hour entered Manila Bay, absolutely unharmed, and encouraged by the wretched gunnery of the Spanish marksmen and the loss by its antagonist of a part of the strength upon which he had relied to do it injury.

Manila lay twenty miles away, the lights illuminating it casting a bright glare upon the horizon. Desiring to attack by daylight, Commodore Dewey signaled that the speed should be four knots. When the lights twinkling this order and the bright replies made thereto by all the ships had died away, the men were permitted to lie down beside their guns. Few slept, for none knew what an hour might develop. The silvery sheen of dawn disclosed a fleet of merchantmen before the city of Manila, but they were not the craft that Dewey sought, and, paying little attention to the batteries which were wildly firing in his direction, he headed the Olympia toward a line of gray objects lying in front of a group of white buildings comprising the naval arsenal of Cavité. Following the Olympia in the order named were the Baltimore, Raleigh, Petrel, Concord, and Boston. Action impending, the McCulloch and the colliers were sent to the middle of the bay, there to give assistance to any of the ships, should assistance be needed.

Thus the opposing squadrons came face to face. Montojo had been informed on April 28 by the Spanish consul at Hongkong: "Enemy's squadron sailed at 2 P. M. from the Bay of Mirs, and according to reliable accounts they sailed for Subig Bay, there to destroy our squadron, and will then go to Manila." He was apprised of Dewey's appearance off Cape Bolinao on April 30, and of his arrival off Subig Bay twelve hours later. He learned of the search made in Subig, but, despite the grim persistency which this procedure betokened, he seemed to think that Dewey would hesitate to force Manila Bay. If so, he underestimated his man and paid the penalty of his mistake. Officers and men of the Spanish force were in Manila, some in bed, when the news that the American squadron was in the Boca Grande reached the city. They were hastily summoned, and for several hours were compelled to suffer that nervous mood which oppresses most men prior to battle, before they sighted the ships destined to deal death and destruction among them.

Such little preparation as could be made in the short time remaining before the battle Montojo attempted. Yet the first gun had not been fired when the Spaniards knew that they were beaten. Montojo directed that every disposition be made

to burn the coal and stores at Cavité Arsenal, to prevent them from falling into Dewey's hands. He distributed his ships in a long, curved line, one end of which, protected by batteries and iron lighters loaded with sand, rested on Sangley Point. They were in such position that the batteries of Fort San Felipe and Cavité could fire over them. In the Spanish line of battle were the Don Antonio de Ulloa, Castilla, Reina Cristina (flagship), Don Juan de Austria, Isla de Cuba, Isla de Luzon, and Marques del Duero. Lying at the arsenal were the Velasco, Lezo, and Argos, and the Manila took refuge in the roads of Bacoor, not far distant. None of these last-named vessels joined in the action. Admiral Montojo, in his comparison of the relative strength of the two squadrons, counted himself greatly inferior, as shown by this table, which he prepared.

	Tons.	Horse-power.	Guns.	Men.
American	21,410	49,290	163	1750
Spanish	10,111	11,200	76	1875

Approaching the Spanish line, the momentous signal, "Prepare for general action," was flown from the signal-mast of the Olympia, and following it the inspiring flag of our country was broken out on every ship. What a thrilling moment! Answering the challenge, the Spaniards



Drawn by Henry Reuter Dahl

THE BATTLE OF MANILA BAY

The crew of the Reina Cristina escaping from the burning ship

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hoisted their red and yellow colors, and a deafening roar announced that the batteries of Cavité and Manila were endeavoring to cripple or destroy their audacious enemy. At twenty minutes after five the Spanish vessels joined in the thunder of battle. Save for two shells fired by the Concord at the Manila battery, our squadron proceeded silently, relentlessly, toward its naval antagonist. Fifty-six hundred yards distant, the commander-in-chief, without the smallest trace of excitement, turned to Captain Charles V. Gridley, commanding the Olympia, and authorized him to open fire. It was the now famous legend: "You may fire when you're ready, Gridley." Immediately one of the eight-inch guns of the forward turret sent its steel messenger of a nation's wrath toward the Spanish line. As each vessel got within range, it, too, discharged all available guns. Regardless of mines—two of which Dewey reported as exploding just ahead of the Olympia—the flagship, followed by her supporting ships, ran parallel to the Spanish vessels, smothering some and demoralizing all by a deadly hail of projectiles. At the beginning of the action, a lead-colored launch steamed toward the flagship. Seemingly a dangerous torpedo-boat was coming to perform its deadly mission. The

secondary batteries of the Olympia and Baltimore quickly picked up the range, and disabled the launch, which turned toward the shore, where she was beached. Another torpedo-launch, which Dewey discovered, was equally unfortunate, being sunk in the shallow water near Cavité. The Spaniards claimed that no torpedo-boats participated in the action, and that the craft which was beached was really a market-boat performing its daily duty. These distracting incidents of the battle did not, however, divert the attention of the American gunners from the one important fighting ship of the Spanish force — the Reina Cristina. She was the target of all the marksmen of our squadron, and only when she was out of range did the Castilla and other Spanish vessels undergo a fire as murderous as that to which the flagship had been subjected. Believing that closer quarters might turn the tide of battle, Montojo, in the Reina Cristina, put out from the Spanish line. The maneuver promised nothing, but it created an opportunity to show to Spain and to the world how bravely a Spaniard could die. An exploding shell set the cruiser on fire forward, a six-inch projectile pierced her stern, and through the hole thus made an eight-inch shell, with terrible energy, forced its way. Flames burst from the hull; white steam mingling with the

black smoke showed that the steam-pipes had been penetrated. Uncontrollable, her decks filled with dead and wounded and slippery with blood, the *Cristina* retreated from the fire she had precipitated and sought refuge at Cavité. The *Isla de Cuba* and the *Isla de Luzon* were signaled to aid the *Marques del Duero* and men from the Cavité Arsenal in rescuing such of the crew as were alive, and this was accomplished under a fire as terrifying as that which had destroyed the Spanish flagship. The execution done by the American squadron is shown by the fact that when the *Cristina* went into action her complement comprised 493 men. The men able to respond to muster at Cavité Arsenal numbered 160, of whom 90 were wounded. The loss of the vessel in killed and wounded was thus 423 men.

Dewey passed up and down parallel to the enemy's line three times, the range decreasing from 5600 yards to 2600 yards as confidence grew in the charts and in the marks of the leadsmen, and as contempt developed for the Spanish gunners afloat and ashore. Spanish shell churned the water along the path of the squadron, passed between the smokestacks of the ships, and, shrieking, flew high above their mastheads. Erroneously informed that its 5-inch battery was short of ammunition, the *Olympia* signaled at 7.35 A.M.

to "withdraw from action," and, when out of reach of Spanish range, Dewey ordered: "Let the people go to breakfast." Except for a little coffee given on some of the ships in the early morning, the men had been without food for sixteen hours; yet they served their guns with the energy, alacrity, and courage which have so often been the characteristics of American seamen.

Distant from the Spanish squadron, the terrible effects of the American fire could be seen; the *Reina Cristina* lay under the north wall of Cavité, her bulwarks awash. The *Castilla* still floated, but she was on fire, and at ten o'clock her flag came down, and flames sprang from her hull, and, with fantastic leaps, licked her spars. The *Don Juan de Austria*, which had received almost the concentrated fire of the American squadron when the destruction of the *Cristina* was complete, was badly damaged, and the *Isla de Cuba* and the *Isla de Luzon* had been repeatedly struck. The Spanish ships, which had hastened in disorder behind Cavité Arsenal, were, with the exception of the *Antonio de Ulloa*, abandoned, and their sea-valves were broken. The commander of the *Don Antonio de Ulloa* disregarded Montojo's instruction to sink his ship, and gallantly remained to resume battle on odds promising certain disaster.

While the men were at breakfast Commodore Dewey consulted his captains in regard to conditions aboard their vessels and the next move in the programme. During the conference a strange vessel was sighted, and the captains returned to their posts prepared to do battle in case reinforcements for the enemy had arrived. The stranger was found to be a merchantman. After the destruction of the Spanish ships Dewey sent word to the governor-general of the Philippines to order the batteries defending Manila to cease fire instantly or he would shell the city. This warning was effective, and then the admiral returned to Cavité to complete the work of destruction. The Baltimore, leading the column in place of the Olympia, was granted permission to attack the enemy's earthworks. A duel between ship and shore occurred, described as one of the most picturesque events of that eventful day. The battery at Canaço was the first to withdraw from the contest, its flag hauled down and the men flying from their defenses. Fort Sangley was the next to undergo the American fire, the entire squadron joining in the attack. Bursting shell silenced the guns thrice, and finally a white flag succeeded the Spanish ensign, showing that the enemy had surrendered. As the Baltimore neared Sangley Point, the Don

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In this way only could substantial compensation be given, but it was given spontaneously, and the officers who received it knew that their greater reward would lie in the fact that they had gloriously observed the traditions which have made the American navy historically famous.¹

¹ For an account of the presentation by Act of Congress of a sword to Admiral Dewey, see Appendix C.

VII

THE BLOCKADE OF CUBA AND ITS EFFECT

By the terms of the joint resolution voted by Congress on April 19, 1898, and approved by the President on the following day, the government of the United States recognized the independence of Cuba and pledged itself to remove Spanish control. Of itself, this resolution made that island the military objective of the American land and naval forces. All other offensive operations, though necessarily conducive to final victory, were simply incidental to its attainment. Mars had girded on his armor and was raising his sword to strike. In dispatches to the President and the State Department, Minister Woodford, in Madrid, had asserted that a public sentiment was there crystallizing which would sustain the Spanish government in its effort to preserve peace even though the price were the surrender of an island which had been an appurtenance of the Crown for four hundred years. So rapid was the march of events, however, that this sentiment failed to attain the strength necessary to enable Maria

Christina, the brave and anxious mother of Alphonso XIII., to sever from the kingdom of her son the "Pearl of the Antilles." Approval by the President of the joint resolution of Congress was immediately followed by a request from the Spanish Minister in Washington for his passports. To Minister Woodford an instruction was sent directing him to demand formally that the government of Spain at once relinquish its authority and government in Cuba and withdraw its land and naval forces therefrom. Before the Minister could communicate this instruction to the Spanish Minister for Foreign Affairs, he was notified that diplomatic relations had been broken off. His further stay in Madrid rendered useless, he withdrew.

Diplomacy had failed. To the sailor and to the soldier the United States now intrusted the task of expelling Spain from Cuba. In the councils of the Navy Department there were some who asserted that this purpose could be most promptly and economically achieved by destruction of the commerce of Spain and by threatening ports of the Peninsula which lay upon the seashore and which were known to be as notoriously lacking in defense as were those situated near the seaboard of the United States. To such advice the department gave consideration, but it was not followed

because the plan, worked out long before hostilities began, contemplated a procedure which would place the greater strain upon Spain and give the United States the further advantage of time in which to organize an army sufficiently well equipped and drilled and adequate in numbers to overcome the enemy's troops in Cuba. History shows that Spain has been always courageous in defense. Napoleon's Peninsular campaign placed his brother on the throne at Madrid, but Castilian pertinacity and Castilian patriotism forced its relinquishment. Mere bombardment of Spanish ports would have caused simply wanton destruction of property, and might have roused Continental Europe, avowedly sympathetic with Spain, to interfere in her behalf. Conquest of the Peninsula would have demanded an army large and highly trained, and its transportation a distance of more than three thousand miles — a dangerous maneuver, in view of the fact that Spain's available naval force in the Atlantic Ocean was nominally the equal in fighting strength of that which we had assembled in our own waters. Had Admiral Cervera and his officers been permitted to direct the naval operations of their country, they would have endeavored to shift the burden of offense to the shoulders of the United States. "The idea of sending the fleet to Cuba,"

Admiral Cervera wrote before the war, "seems to have been abandoned, I believe very wisely. Concerning Porto Rico I have often wondered whether it would be wise to accumulate there all our forces, and I do not think so. If Porto Rico is faithful, it will not be such an easy job for the Yankees; if it is not faithful, it will inevitably follow the same fate as Cuba, at least for us. On the other hand, I am very much afraid for the Philippines and the Canaries, as I have said before; and, above all, the possibility of a bombardment of our coast, which is not impossible, considering the audacity of the Yankees, and counting, as they do, with four or five vessels of higher speed than our own." These views were entertained also by Cervera's subordinates, as is shown by the following decision of the council of war held on board the Cristobal Colon at Cape Verde Islands on April 21, before the squadron sailed for the Caribbean Sea: —

Several opinions were exchanged concerning the probable consequences of our campaign in the West Indies; the great deficiencies of our fleet compared with that of the enemy were made manifest, as well as the very scanty resources which the islands of Cuba and Porto Rico were able to offer for the purpose of establishing a base of operations. In consideration of this, and the grave consequences for the nation of a defeat of our fleet in Cuba, thus leaving unobstructed the coming of the enemy against



Drawn by Henry Reuter

EARLY MORNING ON THE BLOCKADE

The cruisers New York, Nahville, and Wilmington, the torpedo-boat Porter, and the revenue-cutter Hudson off the coast of Cuba



the Peninsula and adjacent islands, it was unanimously agreed to call the attention of the government, by means of a telegram, in which the commander-in-chief of the squadron, in agreement with the second in command and the commanders of the vessels, suggested to go to the Canaries.

In the light of the best thought focused upon the situation, the Navy Department determined to concentrate our sea strength in the Atlantic upon Cuba particularly, and Porto Rico incidentally. Had we been opposed by a more powerful enemy, immediate capture of Porto Rico might have been advisable. Using it as a base, we could have threatened his communications and thus retarded, if not actually prevented, his relief of Cuba. Had he remained in occupation, he would have been in an excellent geographical position to defend Cuba and menace our ports. As the United States had no outlying colonies and no lines of communication to support, and our coast is distant only ninety miles from Havana, the Naval War Board rightly concluded that conquest of Porto Rico promised no results commensurate with the sacrifice such action would entail.

That Cuba had been selected as the first scene of American naval endeavor must have been apparent to Spain and to other naval and military

nations, for at Key West lay a fleet at least able to initiate action for the accomplishment of the object declared in the congressional resolution. Essential as was such mobilization, it was not regarded with satisfaction by the timid among the inhabitants of our seaboard. Apologies are profuse now for the fears of Spanish bombardment entertained by certain coast cities and towns, but in April of 1898 there was insistent demand for protection, and the department was compelled to modify the rule of concentration adopted as the guide of its conduct during the war. The double-turreted, low-freeboard monitors—four in number—had been constructed specially to supplement the shore fortifications in repelling attack by an enemy. It was suggested that one be stationed at Boston, another at New York, a third at the mouth of the Delaware, and a fourth at Hampton Roads. But clamor for protection arose at points for which we had no monitors. Besides, a single vessel of this type, not of modern construction and armament, would be of little avail in a battle with five armored cruisers, swift and thus able to choose the scene and position in conflict, and provided with an armament composed of the latest models of heavy guns. To reduce this superiority, it was urged that the monitors be mobilized at a central point on the

Atlantic coast. The insuperable objection to this plan was that the slowness of the craft would prevent them from reaching a distant port attacked by the enemy in time to catch him if he were disposed to avoid a fight. Were he willing to risk the chances of conflict, their unsteadiness as gun platforms in a seaway would increase their disadvantage.

Thus, though the monitors were built especially for coast defense, they were manifestly unsuited for this purpose, and the department, driven to the employment of every weapon, whatever its value, was compelled to order them to Key West for participation in offensive operations for which they were equally unsuited. This decision necessitated, however, the division of the battle fleet, the full strength of which would be needed in case Spain made the natural tactical move and mobilized her entire fighting force. Circumstances consequently forced separation of the real effectives of the United States navy—its battle-ships and armored cruisers; but as far as possible the department sought to overcome them and to place each squadron within supporting distance of the other. The “Flying Squadron,” the name of which denotes the purpose of its organization, was assembled at Hampton Roads, a thousand miles from Key West, but

within reach of that point and of Porto Rico, and yet within easy striking distance of the great commercial center of New York, upon which particularly it was apprehended that an attack might be made. Organization of the Northern Patrol Squadron, at first composed of the San Francisco, flagship of the commander-in-chief, Prairie, Dixie, Yankee, and Yosemite, relieved to some extent the pressure upon the Navy Department to hold the Flying Squadron at Hampton Roads, and partially allayed the unwarranted terror felt by the inhabitants of the coast towns.

Instead of frittering away our naval strength by assignment of vessels before every port of the Atlantic and Gulf coasts, the department, by the use of makeshifts, succeeded in concentrating it at last into two squadrons. That at Key West, when war began, had an armored backbone made up of the battle-ships Indiana and Iowa, armored cruiser New York, and monitors Puritan, Miantonomoh, Amphitrite, and Terror. The lighter framework was made up of the cruisers Cincinnati, Detroit, Marblehead, and Montgomery, the gunboats Castine, Dolphin, Helena, Machias, Wilmington, Nashville, Newport, Vesuvius, Fern, and Mayflower, the transport steamer Resolute, revenue cutters McLane and Morrill, lighthouse tender Mangrove, tugs and converted

yachts Accomac, Leyden, Uncas, Wompatuck, Eagle, Hawk, and Hornet, and torpedo-boats Cushing, Dupont, Ericsson, Foote, Rodgers, and Winslow. Other vessels were rapidly added. The Flying Squadron comprised the battle-ship Massachusetts, second-class battle-ship Texas, armored cruiser Brooklyn, protected cruisers Columbia, Minneapolis, and New Orleans, armored ram Katahdin, and converted yacht Scorpion. Hastening with all speed around Cape Horn were the battle-ship Oregon and gunboat Marietta, the former needed to reinforce the armorclads of the North Atlantic fleet and make them undoubtedly the superior of the Spanish ships believed to be ready for sea.

In the officers and men who formed the complements of the vessels which represented the naval arm of the United States, the country possessed efficient and courageous servants who could be depended upon to do their duty and to do it well. Commanding the division at Key West was Captain William Thomas Sampson, promoted upon the outbreak of war to the rank of acting rear-admiral and given supreme command of the entire naval force in North Atlantic waters. Before the destruction of the Maine, none of the officers on the active list of the navy was prominently known to the country,

though many had gained distinction in their profession and some had displayed gallantry and ability during the war of the Rebellion. Sampson was preëminent among this number. His courage had been proven by performance in the Civil War. An officer of the ill-fated Patapsco, sunk by a submarine mine at Charleston, S. C., he calmly stood on the roof of the turret while the vessel was going to the bottom, and when his men had safely left the ship he stepped into the water. He demonstrated his progressiveness by striving constantly to improve the service. His executive ability, especially in ordnance, made him a rare administrator, and was responsible for his retention on shore duty a longer period than usual. When I entered the Navy Department, Sampson was chief of the Bureau of Ordnance. He was offered a transfer to the Bureau of Navigation, but, believing that he would be more useful at sea and that his health would be benefited by the change, he declined it and assumed command of the battle-ship Iowa in the summer of 1897. The North Atlantic Squadron was then under Rear-Admiral Montgomery Sicard, who had earnestly and energetically striven to make his command an efficient instrument of war. Illness of this commander-in-chief caused the Secretary of the Navy, in March of 1898, to appoint



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BATTLE-SHIP MASSACHUSETTS

1. The first line of the document is a header line.

a board of medical survey to make an examination of his physical condition. To his own regret, no less than to that of the authorities in Washington, he was condemned, and the department was advised that his health demanded his detachment from the squadron.

On the eve of war the department was confronted by the necessity of choosing a fitting successor to this capable and conscientious officer. The moment required a man of splendid judgment, quick decision, possessing intimate knowledge of the characteristics of the vessels he would have to use and the officers and men manning them, and enjoying the esteem and confidence of his subordinates. The consensus of naval opinion was that Sampson had these qualifications. He had graduated number one in his class at the Naval Academy, and this without social prestige. He had maintained this superiority throughout his naval career. He had been a dominant voice in important boards which had considered the development of the matériel and personnel of the New Navy. He was the senior captain of the North Atlantic Squadron, and in command of it during Sicard's incapacity. He enjoyed the full confidence not only of the officers and men of his own ship, but of the officers and men of the entire navy.

There was no political demand for Sampson. He had no friends in Congress to speak for him, nor did he directly or indirectly indicate to the department that he desired to succeed Rear-Admiral Sicard. For his selection the department is alone responsible; and it was made advisable by the interests of the country, to which the eye of the department was single. The President gave his cordial approval to the choice, and Sampson, though there were worthy and efficient officers his seniors, was to give ample evidence that the assignment was right.

Commodore Winfield Scott Schley was in Washington serving as chairman of the Lighthouse Board when the Maine was destroyed. He at once made application for assignment to sea duty, and upon the organization of the Flying Squadron I selected him as its commander-in-chief. Among his naval associates Schley was not credited with as high a measure of professional ability and judgment as Sampson and some other officers. Nevertheless, his career was filled with stirring incidents which had their scenes in the War of the Rebellion, in the frozen North, where he voluntarily went in search of Greely and his daring companions, and in other parts of the world where American interests demanded protection. He had been chief of the Bureau



Photograph by C. M. Gilbert

REAR-ADMIRAL JOHN ADAMS HOWELL

Commander of the Northern Patrol Squadron during the war

1. The first part of the document is a list of names and addresses of the members of the committee.

of Equipment, had commanded a vessel of the New Navy, and appeared to be an officer of skill, judgment, and resource. That there might be no doubt of his position at sea, I personally informed him that, while his command would, for a time at least, be independent, it was a part of the North Atlantic fleet, and when his squadron and that at Key West were merged he would be subordinate to Acting Rear-Admiral Sampson. To this condition he cheerfully agreed, and expressed his cordial readiness for coöperation and service.

To assure efficient operations on the part of the numerous vessels engaged in the blockade of Cuba, the department determined, a few days after the outbreak of war, to order two officers of the rank of commodore to report to Rear-Admiral Sampson. Commodore George C. Remey, who was senior to Sampson in actual rank, accepted orders to command the naval base at Key West. In a letter to Sampson in regard to Commodore Remey's duty, it was explained that the latter would see that the ships of the squadron were coaled, provisioned, and supplied with ammunition speedily, and that any repairs on them were pressed with all the dispatch possible with the facilities on board the ships themselves and at the station on shore.

"One of his most important duties," to quote the letter, "will be to complete each vessel that you send him or that comes to his station as quickly as possible and return to you." Commodore John C. Watson, the junior commodore, ordered to report to Sampson, was appointed for employment in the squadron operating on the coast of Cuba, or in the general neighborhood. The object of sending him was to provide Rear-Admiral Sampson with assistance in the military duties devolving upon him in connection with the squadron of operations. Commodore John A. Howell, the commander of the Northern Patrol Squadron, had been brought home from the European Station, of which he had served as commander-in-chief.

The captains of the ships would be largely the brains directing maneuvers in action; and upon their behavior and judgment would to that extent depend whether their commands fought well or ill. Anticipating war, the department had been most careful in its selections of commanding officers. Of the armorclads, all but two were commanded by officers assigned during my administration, and the exceptions were Captain Henry C. Taylor, commanding the battle-ship *Indiana*, and Captain Francis A. Cook, commanding the armored cruiser *Brooklyn*, who had been assigned

by my predecessor. Captain Taylor had gone to sea from the Naval War College, where at its head he had solved problems such as were likely to arise during the war. Captain Cook assumed command of the Brooklyn on December 1, 1896. Both thoroughly understood their ships, and could be depended upon to handle them with skill. The promotion of Captain Sampson left the Iowa without a commander, and the vacancy was filled by the assignment of Captain Robley D. Evans, at the time serving on the Lighthouse Board. Captain Evans's career showed intrepidity and resource, and the department knew he could be relied on. The armored cruiser New York was under Captain French E. Chadwick. Captain Chadwick had been chief of the Bureau of Equipment, which had charge of all matters connected with the equipment of ships and coaling, and the knowledge he possessed, especially in relation to such matters, made him valuable to the commander-in-chief, whose flag floated on the New York. Captain John W. Philip was the commander of the Texas. He was known to be a brave, God-fearing man. The Massachusetts had as her captain Francis J. Higginson, an earnest officer. The scout St. Paul was given to Captain Charles D. Sigsbee, who had commanded the ill-fated Maine; and Lieutenant-Commander

Richard Wainwright, executive of that sunken ship, was ordered to the auxiliary yacht **Gloucester** when she was commissioned. Captain Bowman H. McCalla was on the **Marblehead**. The department had no difficulty in obtaining willing hands, for most of the officers of the service on shore volunteered for sea duty, and those of sufficient rank were placed in command of vessels available. The following is a list of vessels and their commanding officers that served during the war:—

NORTH ATLANTIC STATION.

Collier **Abarenda**, Lieutenant-Commander **W. H. Buford**.

Collier **Alexander**, Commander **W. T. Burwell**.

Revenue cutter **Algonquin**, Boatswain **James Matthews**.

Monitor **Amphitrite**, Captain **C. J. Barclay**.

Gunboat **Annapolis**, Commander **J. J. Hunker**.

Tug **Apache**, Lieutenant **G. C. Hanus**.

Lighthouse tender **Armeria**, Commander **L. C. Logan**.

Tug **Accomac**, Ensign **W. S. Crosley** to May 6, 1898, then
Boatswain **J. W. Angus**.

Auxiliary cruiser **Badger**, Commander **A. S. Snow**.

Gunboat **Bancroft**, Commander **Richardson Clover**.

Armored cruiser **Brooklyn**, Captain **F. A. Cook**.

Collier **Cæsar**, Lieutenant-Commander **A. B. Speyers**.

Revenue cutter **Calumet**, First Lieutenant **W. H. Cushing**,
Revenue Cutter Service.

Collier **Cassius**, Commander **Samuel W. Very**.

Gunboat **Castine**, Commander **R. M. Berry**.

Supply-ship **Celtic**, Commander **H. B. Mansfield**.

Cruiser Cincinnati, Captain C. M. Chester.
Cruiser Columbia, Captain J. H. Sands.
Torpedo-boat Cushing, Lieutenant Albert Gleaves.
Cruiser Detroit, Commander J. H. Dayton.
Auxiliary cruiser Dixie, Commander C. H. Davis.
Gunboat Dolphin, Commander H. W. Lyon.
Converted yacht Dorothea, Lieutenant-Commander W. J. Barnette.
Torpedo-boat Dupont, Lieutenant S. S. Wood.
Converted yacht Eagle, Lieutenant W. H. H. South-land.
Torpedo-boat Ericsson, Lieutenant N. R. Usher.
Gunboat Fern, Lieutenant-Commander W. S. Cowles until April 27, 1898, then Lieutenant-Commander Herbert Winslow.
Fish Commission vessel Fish-Hawk, Lieutenant-Commander F. H. Delano.
Ferry-boat East Boston, Passed-Assistant Engineer W. M. Gilman.
Torpedo-boat Foote, Lieutenant W. L. Rodgers.
Converted yacht Frolic, Commander E. H. Green.
Supply-ship Glacier, Commander J. P. Merrell.
Converted yacht Gloucester, Lieutenant-Commander Richard Wainwright.
Revenue cutter Gresham, Captain C. A. Abbey, Revenue Cutter Service.
Ferry-boat Governor Russell, Lieutenant Charles H. Grant.
Torpedo-boat Gwin, Lieutenant C. S. Williams.
Revenue cutter Hamilton, Captain W. D. Roath, Revenue Cutter Service.
Collier Hannibal, Commander H. G. O. Colby.
Converted yacht Hawk, Lieutenant J. Hood.
Gunboat Helena, Commander W. T. Swinburne.

Converted yacht Hist, Lieutenant L. Young.
Converted yacht Hornet, Lieutenant J. M. Helm.
Revenue cutter Hudson, First Lieutenant F. H. Newcomb,
Revenue Cutter Service.
Battle-ship Indiana, Captain H. C. Taylor.
Battle-ship Iowa, Captain R. D. Evans.
Steamer Iris, Lieutenant Arthur B. Connor.
Collier Justine, Commander G. E. Ide until July 10, then
Commander W. L. Field.
Gunboat Lancaster, Commander Thomas Perry.
Collier Lebanon, Lieutenant-Commander C. T. Forse.
Collier Leonidas, Commander W. I. Moore.
Tug Leyden, Boatswain J. W. Angus until May 6, 1898,
then Ensign W. S. Crosley.
Gunboat Machias, Commander J. F. Merry until June 27,
1898, then Commander W. W. Mead.
Revenue cutter Manning, Captain F. M. Munger, Revenue
Cutter Service.
Lighthouse tender Mangrove, Lieutenant-Commander
W. H. Everett until June 7, 1898, then Lieutenant-Com-
mander D. D. V. Stuart.
Lighthouse tender Maple, Lieutenant-Commander W.
Kellogg.
Cruiser Marblehead, Commander B. H. McCalla.
Gunboat Marietta, Commander F. M. Symonds.
Converted yacht Mayflower, Commander R. M. S. Mac-
kenzie.
Battle-ship Massachusetts, Captain F. J. Higginson.
Torpedo-boat McKee, Lieutenant C. M. Knepper.
Revenue cutter McLane, First Lieutenant W. E. Rey-
nolds.
Collier Merrimac, Commander J. M. Miller.
Monitor Miantonomoh, Captain M. L. Johnson.
Cruiser Minneapolis, Captain T. F. Jewell.



Photograph by Rice

REAR-ADMIRAL GEORGE COLLIER REMEY

Commandant of the naval base at Key West during the war



Cruiser Montgomery, Commander G. A. Converse.
Revenue cutter Morrill, Captain H. D. Smith, Revenue
Cutter Service.
Torpedo-boat Morris, Lieutenant C. E. Fox.
Gunboat Nashville, Commander W. Maynard.
Collier Niagara, Commander G. A. Bicknell until May 30,
1898, then Lieutenant-Commander E. S. Prime.
Cruiser Newark, Captain A. S. Barker.
Cruiser New Orleans, Captain William Folger.
Gunboat Newport, Commander B. F. Tilley.
Armored cruiser New York, Captain F. E. Chadwick.
Tug Oneida, Lieutenant W. G. Miller.
Battle-ship Oregon, Captain C. E. Clark until August 6,
1898, then Captain A. S. Barker.
Tug Osceola, Lieutenant J. L. Purcell.
Transport Panther, Commander G. C. Reiter.
Tug Peoria, Lieutenant T. W. Ryan.
Tug Piscataqua, Lieutenant-Commander N. E. Niles.
Collier Pompey, Commander J. M. Miller.
Torpedo-boat Porter, Lieutenant J. C. Fremont.
Auxiliary cruiser Prairie, Commander C. J. Train.
Gunboat Princeton, Commander C. H. West.
Tug Potomac, Lieutenant G. P. Blow.
Monitor Puritan, Captain P. F. Harrington until June 18,
1898, then Captain Frederick Rodgers.
Transport Resolute, Commander J. G. Eaton.
Torpedo-boat Rodgers, Lieutenant J. L. Jayne.
Cruiser San Francisco, Captain R. P. Leary.
Collier Saturn, Commander S. W. Very until June 4, 1898,
then Commander G. A. Bicknell.
Collier Scindia, Commander E. W. Watson.
Converted yacht Scorpion, Lieutenant-Commander A.
Marix.
Tug Sioux, Ensign W. R. Gherardi.

Tug Sirgen, Lieutenant J. M. Robinson.
Hospital-ship Solace, Commander A. Dunlap.
Collier Southery, Commander W. Goodwin.
Collier Sterling, Commander R. E. Impey.
Converted yacht Stranger, Lieutenant G. L. Dyer.
Supply-ship Supply, Lieutenant-Commander R. R. Ingersoll.
Converted yacht Suwanee, Lieutenant-Commander D. Delehanty.
Converted yacht Sylvia, Lieutenant G. H. Peters.
Tug Tecumseh, Lieutenant G. R. Evans.
Monitor Terror, Captain Nicoll Ludlow.
Battle-ship Texas, Captain J. W. Philip.
Torpedo-boat Talbot, Lieutenant W. R. Shoemaker.
Gunboat Topeka, Commander W. S. Cowles.
Tug Uncas, Lieutenant F. R. Brainard.
Dynamite cruiser Vesuvius, Lieutenant-Commander J. E. Pillsbury.
Gunboat Vicksburg, Commander A. B. H. Lillie.
Converted yacht Viking, Lieutenant-Commander J. C. Wilson.
Converted yacht Vixen, Lieutenant A. Sharp, Jr.
Repair-ship Vulcan, Lieutenant-Commander I. Harris.
Converted yacht Wasp, Lieutenant A. Ward.
Revenue cutter Windom, Captain S. E. Maguire, Revenue Cutter Service.
Gunboat Wilmington, Commander C. C. Todd.
Torpedo-boat Winslow, Lieutenant J. B. Bernadou.
Tug Wompatuck, Lieutenant C. W. Jungen.
Revenue cutter Woodbury, Captain H. B. Rogers, Revenue Cutter Service.
Auxiliary cruiser Yankee, Commander W. H. Brownson.
Converted yacht Yankton, Lieutenant-Commander J. D. Adams.

Auxiliary cruiser Yosemite, Commander W. H. Emory.
Ram Katahdin, Captain G. F. F. Wilde.
Auxiliary cruiser St. Louis, Captain C. F. Goodrich.
Auxiliary cruiser St. Paul, Captain C. D. Sigsbee.
Auxiliary cruiser Harvard, Captain C. S. Cotton.
Auxiliary cruiser Yale, Captain W. C. Wise.

ASIATIC STATION.

Protected cruiser Olympia, Captain B. P. Lamberton.
Protected cruiser Baltimore, Captain N. M. Dyer.
Protected cruiser Charleston, Captain Henry Glass.
Protected cruiser Raleigh, Captain J. B. Coghlan.
Protected cruiser Boston, Captain Frank Wildes.
Monitor Monterey, Commander E. H. C. Leutze.
Monitor Monadnock, Captain W. H. Whiting.
Gunboat Concord, Commander Asa Walker.
Gunboat Monocacy, Commander O. W. Farenholt.
Gunboat Petrel, Commander E. P. Wood.
Collier Brutus, Lieutenant V. L. Cottman.
Steamer Nanshan, Lieutenant B. W. Hodges.
Steamer Nero, Commander Charles Belknap.
Supply-ship Zafiro, Ensign H. A. Pearson.
Revenue cutter McCulloch, Captain D. B. Hodgson, Revenue Cutter Service.

PACIFIC STATION.

Fish Commission steamer Albatross, Lieutenant-Commander Jefferson F. Moser.
Gunboat Bennington, Commander H. E. Nichols.
Gunboat Wheeling, Commander Uriel Sebree.
Unprotected cruiser Mohican, Commander George M. Book.
Revenue cutter Corwin, Captain W. J. Herring, Revenue Cutter Service.

Revenue cutter Grant, Captain J. A. Slamm, Revenue Cutter Service.

Revenue cutter Perry, Captain W. J. Kilgore, Revenue Cutter Service.

Revenue cutter Rush, Captain W. H. Roberts, Revenue Cutter Service.

AUXILIARIES.

Converted yachts —

Aileen, Lieutenant Alonzo Gartley.

Elfrida, Lieutenant (junior grade) M. A. Orlopp.

Enquirer, Lieutenant W. H. Stayton.

Free Lance, Lieutenant Thomas C. Zereaga.

Huntress, Lieutenant Felton Parker.

Inca, Lieutenant W. E. McKay.

Monitors —

Catskill, Lieutenant M. E. Hall.

Jason, Lieutenant H. F. Fickbohm.

Lehigh, Lieutenant Robert G. Peck.

Montauk, Lieutenant L. L. Reamey.

Nahant, Lieutenant C. S. Richman.

Nantucket, Lieutenant C. B. T. Moore.

Passaic, Lieutenant F. H. Sherman.

Wyandotte, Lieutenant Thomas I. Madge.

Tugs —

Choctaw, Lieutenant (junior grade) W. O. Hulme.

Potomac, Lieutenant George P. Blow.

Powhatan, Lieutenant (junior grade) F. M. Russell.

Cruiser Restless, Lieutenant A. H. Day.

Steamer Arctic, Lieutenant George C. Stout.

SPECIAL SERVICE.

City of Pekin, Commander W. C. Gibson.

UNASSIGNED.

Cruiser Buffalo, Captain J. N. Hemphill.

Cruiser Panther, Commander George C. Reiter.

Steamer Hector, Commander F. M. Wise.

Protected cruiser Philadelphia, Captain G. H. Wadleigh.

TUGS AT KEY WEST, FLA.

Samoset, Acting Boatswain Patrick Deery.

Massasoit, Lieutenant Alfred Reynolds.

Nezinscot, Boatswain J. J. Holden.

Sioux, Mate Albert Benzon.

Such were the vessels and their commanders assembled to execute the pledge made by the United States. While bending every energy and straining every nerve to make ready for war, the Navy Department had maintained the most careful surveillance over Spain's preparations. Like our own force, the section of Spain's armored fleet in the Atlantic Ocean was divided into two squadrons, one of which, homogeneous and mobile, was at the Cape Verde Islands, and the other, unready, although the work upon it was pushing to completion, was distributed among the ports of Spain. The squadron at the Cape Verde Islands had been assembled by the withdrawal from the West Indies of the armored cruisers Vizcaya and Almirante Oquendo, which had been sent across the ocean to display the flag of Spain and to show the United States that their government pos-

sessed means of defense, and to inspire courage and faith among the loyal in the islands of Cuba and Porto Rico. War's approach caused the dispatch of the Vizcaya and Oquendo to St. Vincent, where they found the armored cruisers Infanta Maria Teresa and Cristobal Colon, the torpedo-boat destroyers Furor, Terror, and Pluton, and three torpedo-boats and two colliers. This first move by Spain was sagacious, and it was anticipated that she would follow it up by adding the Carlos V. and Pelayo, the former an armored cruiser and the latter a battle-ship, to the force. Such action would have required concentration of all American armored ships in the Atlantic, for the Oregon could not have arrived at Key West by the time the Spanish fleet reached American waters, and singly each division of ours would have been inferior to the enemy.

The exact strength of the Spanish fleet was to us unknown. It was true that the department had received many reports, some apparently authoritative and circumstantial, indicating that the ships were indifferently equipped and inefficiently manned, and these reports were worthy of some credence in view of the defects supposed to exist in Spanish administration, and the neglect which the Madrid government had observed toward its navy. After a visit to Cadiz in 1793, Nel-



ADMIRAL CERVERA



son wrote: "The Dons may know how to build beautiful ships, but they do not know how to procure men. At Cadiz they have in commission four battle-ships of first rank, very beautiful ships, but miserably manned." Until the contrary was established, the department, however, was bound to estimate the Spanish ships as highly trained and efficient, to credit their officers and men with patriotism and strategical and tactical ability, and to put forth every effort to bring about their prompt destruction. Five of the Spanish vessels were armored cruisers, all of modern construction and armament and possessing on paper swifter heels than any of our armor-clads with the exception of the Brooklyn and New York; and one was a battle-ship, which, if properly fought, could give a good account of itself in a duel with the Indiana. Spain had also a type of vessel which we had not, and which, its possibilities unknown, was greatly feared by experts and laymen. I refer to torpedo-boat destroyers. To the department and to the world, Spain possessed a fleet composed of vessels of tactical and strategical value, and properly handled it would have a chance of obtaining control of the sea. We know now how misleading was our information. Writing in the month of April, shortly before the war, Cervera said: —

My fears are realized. The conflict is coming fast upon us; and the Colon has not received her big guns; the Carlos V. has not been delivered, and her 10-cm. artillery is not yet mounted; the Pelayo is not ready for want of finishing her redoubt, and, I believe, her secondary battery; the Victoria has no artillery, and of the Numancia we had better not speak.

In another letter he said:—

You talk about plans, and, in spite of all my efforts to have some laid out, as it was wise and prudent, my desires have been disappointed. How can it be said that I have been supplied with everything I asked for? The Colon has not yet her big guns, and I asked for the bad ones if there were no others. The 14-cm. ammunition, with the exception of about 800 shots, is bad. The defective guns of the Vizcaya and Oquendo have not been changed. The cartridge-cases of the Colon cannot be recharged. We have not a single Bustamente torpedo. There is no plan or concert, which I so much desired and called for so often. The repairs of the servomotors of the Infanta Maria Teresa and the Vizcaya were only made after they had left Spain. . . . The Vizcaya can no longer steam, and she is only a boil in the body of the fleet.

Spain's withdrawal of her Minister and the enforced departure of Minister Woodford from Madrid were, in themselves, defiant declinations to comply with the President's demands. Assured of the safety of Mr. Woodford and the consular officers of the United States, who had started from Spain on April 21 for neutral territory, the President on the following day issued this proclamation of blockade:—

PROCLAMATION

Blockade of Cuban ports. By the President of the United States, a proclamation. Whereas, by a joint resolution passed by the Congress and approved April 20, 1898, and communicated to the government of Spain, it was demanded that said government at once relinquish its authority and government in the island of Cuba, and withdraw its land and naval forces from Cuba and Cuban waters, and the President of the United States was directed and empowered to use the entire land and naval forces of the United States, and to call into the actual service of the United States the militia of the several States, to such extent as might be necessary to carry said resolution into effect; and

Whereas, in carrying into effect said resolution, the President of the United States deems it necessary to set on foot and maintain a blockade of the north coast of Cuba, including ports on said coast between Cardenas and Bahia Honda and the port of Cienfuegos on the south coast of Cuba aforesaid, in pursuance of the laws of the United States and the laws of nations applicable to such cases. An efficient force will be posted so as to prevent the entrance and exit of vessels from the ports aforesaid. Any neutral vessels approaching any of said ports or attempting to leave the same without notice or knowledge of the establishment of such blockade, will be duly warned by the commander of the blockading forces, who will indorse on her register the facts and the date of such warning, where such indorsement was made, and if the same vessel shall again attempt to enter any blockaded port, she will be captured and sent to the nearest convenient port for such proceedings against her and her cargo, as prizes, as may be deemed advisable. Neutral

vessels lying at any of said ports at the time of establishment of said blockade will be allowed thirty days to issue therefrom.

In witness whereof, I have hereunto set my hand, and caused the seal of the United States to be affixed.

Done at the city of Washington, this twenty-second day of April, A. D. 1898, and of the Independence of the United States the one hundred and twenty-second.

[SEAL.]

WILLIAM McKINLEY.

By the President,

JOHN SHERMAN, Secretary of State.

With the limited force at Rear-Admiral Sampson's disposal, a blockade of the entire island was impossible; furthermore, the President had no intention of establishing merely a "paper" blockade, with its accompanying international embarrassments and entanglements. "A blockade to be binding and effective," to quote the instruction given to Rear-Admiral Sampson, "must be maintained by a force sufficient to render ingress to or egress from the port dangerous;" and this principle of international law was observed strictly and legally.

In selecting the ports to be blockaded, the department had considered those which, closed, would shut the enemy off from food supplies and munitions of war. Cuba imports large quantities of foodstuffs, and the insurrection compelled the Spanish troops to obtain most of the

components of their rations from adjacent lands. From Havana a railroad stretched to the east, connecting the capital with Cardenas and Matanzas, and to the west, where it provided communication with Bahia Honda. A branch connected the capital with Cienfuegos, — an excellent harbor, which, it was anticipated, might be the objective of the Spanish squadron. In this section of the island most of the Spanish army was concentrated. Here its rule was effectually maintained, and here it was thought would occur military operations when the War Department determined the time propitious to invade the island.

By the measure of blockade three important results were anticipated: first, exhaustion of the Spanish army in Cuba without injury to ourselves; second, destruction of Spanish commerce, the main artery of which connected the Peninsula and its West Indian possession, and, third, the imposition upon Spain of the duty of sending relief to her colonies, and the consequent strain of conducting war more than three thousand miles from an effective home base. "They," [the Americans,] wrote a Spanish captain of artillery who served in Cuba, "realized that, owing to our lack of naval power, the island of Cuba, separated from Spain by a long distance,

and without direct means for supporting its army and people as a result of the agricultural conditions, could be easily cut off, and reduced by starvation, without much effort or bloodshed." Great as was the promise of this measure, it did not appeal to those who could not understand the department's refusal to permit an immediate assault upon Havana. Rear-Admiral Sampson himself advocated such a movement, pointing out that the batteries—the western batteries particularly—were well placed for an attack from the westward and close inshore, where they would be exposed to a flank fire, or to the fire of our big ships at short range, where the secondary batteries would have full effect. Rear-Admiral Sampson reported that he had discussed the plan with Captains Evans, Taylor, and Chadwick, and that they united with him in the belief that the direct attack was sufficiently promising of the capture of the city to warrant a trial. It is quite possible that had Rear-Admiral Sampson been allowed to make the assault, the results he expected would have been achieved. But the department could not lose sight of the fact that, dashing though the project, it involved a grave element of risk for the vessels participating in it, and that even if Havana were captured, the Spanish squadron at Cape Verde was still intact

and capable of inflicting heavy damage upon our coast, especially if there were any reduction in the fighting strength of our fleet. Writing to the admiral under date of April 6, the Secretary of the Navy said: —

The department does not wish the vessels of your squadron to be exposed to the fire of the batteries at Havana, Santiago de Cuba, or other strongly fortified ports in Cuba, unless the more formidable Spanish vessels should take refuge within those harbors. Even in this case, the department would suggest that a rigid blockade and employment of our torpedo-boats might accomplish the desired object, viz., the destruction of the enemy's vessels, without subjecting unnecessarily our own men-of-war to the fire of the land batteries.

There are two reasons for this: —

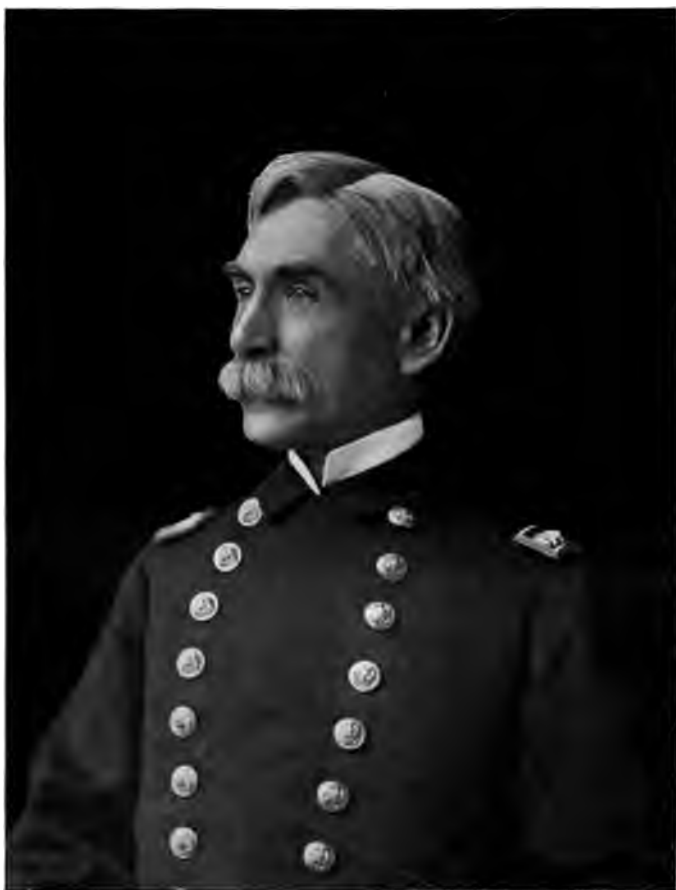
First, there may be no United States troops to occupy any captured stronghold, or to protect from riot and arson, until after the dry season begins, about the first of October.

Second, the lack of docking facilities makes it particularly desirable that our vessels should not be crippled before the capture or destruction of Spain's most formidable vessels.

Spain would have welcomed an attack upon Havana. "It would likewise have been of good effect," observed the Spanish artilleryman I have already quoted, "if we had compelled the enemy to engage in a battle against Havana. A victory there would have cost them much time and blood."

✓ Moreover, Germany and France had made no secret of their wish that Spain should prove victorious, and in Germany particularly, unofficially it is true, there were indications among her people of their contempt for the American navy, and she could not be unconscious that she might develop into an important factor in determining how the war should end.

Preservation of our armored ships was, therefore, imperative. It would have been the height of recklessness to have risked the destruction of one or more of our few battle-ships while the Spanish fleet was afloat intact. Contributory to this decision was the unwillingness of the department to stray from its purpose to devote itself to one thing at a time. Adequate fortification of the Atlantic coast would release the Flying Squadron and enable its location at Cienfuegos on the south of Cuba, the one place above all others where it should be stationed. The blockade of the north coast was strengthened by the armored ships under Rear-Admiral Sampson; that of the south coast was maintained by small vessels, ridiculously inadequate in strength and, at first, in numbers, which could have been brushed aside without the slightest difficulty by the Spanish cruisers. The department was deeply concerned about the maintenance of the blockade



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REAR-ADMIRAL JOHN CRITTENDEN WATSON



of Cienfuegos. Had it been raised, Spain would have gained an advantage which would have been hailed with satisfaction in Europe, and might have produced international complications. To reestablish it, formal proclamation and maintenance before the port of a sufficient number of ships to enforce it would have been necessary. But in the interim merchant ships flying neutral flags departing from or entering Cienfuegos could not have been seized under the provisions of the original proclamation. In consequence of the insufficient force at the disposal of the commander-in-chief, a trade was developed by neutrals with Batabano and other ports in the vicinity of Cienfuegos not specifically closed, and thus the purpose of the blockade in the early days of the war partially failed of effect. International law recognized the legality of this trade unless declared contraband by the United States, and the President and his advisers were not disposed to take this action, because it would have increased the unfriendliness of nations none too well disposed toward us. Once Cervera's fleet was safely locked in the harbor of Santiago, and with additional converted war-ships available, it was possible to prevent this trade by extension of the blockade on the south coast of Cuba from Cape Francis to Cape Cruz. After the destruction of

Cervera's fleet, an expedition was ordered to the Isle of Pines to occupy it as a base for small vessels operating against Cienfuegos, Batabano, and other southern coast ports; but the peace protocol suspended hostilities, and the occupation was not effected. Not so much for the purpose of starving out the Spanish army in Porto Rico as to watch the port and prevent the departure of the Spanish torpedo-boat destroyer which had sought refuge there, a blockade of San Juan was declared.

What was the gain of the blockade of Cuba? This question may be best answered by quoting from an article written by Commander Jacobsen, commanding the foreign cruiser Geier, whose constant inspection of the blockade was a cause of some irritation to the department: —

A walk through the streets of Havana (May 17) revealed the usual every-day life. Of course the traffic was not as great as in time of peace. . . . Beggars were lying about in front of the church doors and in the main streets, among them women with half-starved little children, but not in very large numbers. Many a coin was dropped into their outstretched hands by the passers-by; but there was nothing to indicate that the blockade had entailed serious results for the poorer population. . . . The general opinion was that there were sufficient provisions in the city to sustain the blockade for some length of time; but what was to become of the poorer class of the population in that event was a problem. . .

Since our last visit to Havana, about a month ago (June 22), there was hardly any change noticeable in the aspect of the town and the conditions prevailing there. The harbor was empty and deserted. . . . Provisions were expensive, but the prices were held down by the government, so as to prevent excesses on the part of the dealers. The poor were being taken care of as far as possible by the distribution of food in free kitchens and by entertainments for their benefit. . . . The rate of sickness and death was said to be hardly higher than usual. . . .

We . . . again returned to Havana on August 1. . . . Few changes were noticeable in the city itself. There was not as yet an actual famine, but the poorer classes were evidently much worse off than they had been on our former visit, for the number of beggars in the streets had increased. Crowds of poor people would come alongside the ships in boats to try to get something to eat. . . . "If the Americans would only attack Havana," the people would say, "they would soon find out what the garrison of the capital is made of. They would get their heads broken quick enough. But Uncle Sam is only beating about the bush. He is not going to swallow the hot morsel and burn his tongue and stomach." No wonder that the Spanish troops, condemned to inactivity, poorly fed, cut off from the whole world, and without any prospect of relief, were anxious for the end to come. . . .

. . . But I have information from reliable sources that on August 12 the military administration of Havana had provisions on hand for three months longer, outside of what the blockade-runners had brought into the country and what was hidden away in the houses of the city. One can therefore understand the indignation of Captain-General Blanco when he heard that the peace protocol had been signed. But of what use would have been a

further resistance on the part of the Spanish garrison? The United States government only needed to make the blockade more rigid. That would necessarily have sealed the fate of Havana sooner or later. A fortress in the ocean, cut off from its mother country, can be rescued only with the assistance of the navy. The enemy who has control of the sea need only wait patiently until the ripe fruit drops into his lap.

None regretted more than the President and the people of the United States the condemnation of the poor of Cuba to starvation, by reason of the blockade, equally with the Spanish army. But war inflicts its wounds upon all classes. How different became the condition in Havana when the peace protocol was signed! I again quote from Captain Jacobsen:—

. . . I returned to Havana for the fourth time on September 3. How different everything looked! The clouds of smoke of the blockading ships were no longer seen on the horizon. That circle of brave vessels, greedy for prey, ready every moment to pounce upon anything that came within their reach, had vanished. . . . The harbor entrance was animated. In the harbor itself German, English, and Norwegian steamers were busily engaged in loading and unloading. Alongside the custom-houses there were a number of American and Mexican sailing-vessels that had brought food and wine. All the storerooms were filled with provisions of every kind. The city had awakened to new life, business houses were once more open, merchants were again at work, the streets were full of people. . . .

By her severance of diplomatic relations with the United States Spain had, by international usage, precipitated a state of war; and the United States gave recognition to the same condition by declaring a blockade of her colonies. To define more clearly the status of the United States, and, to quote President McKinley, "to the end that all its rights and the maintenance of all its duties in the conduct of public war may be assured," Congress declared, in accordance with the recommendation of the President, that a state of war existed, and had existed since April 21. This declaration at once imposed the obligations of neutrality upon nations not party to the conflict. The Spanish squadron lay in the Portuguese harbor of St. Vincent, Cape Verde Islands. It had been rumored that Portugal would throw in her fortune with Spain, and this report was important, because the attitude of the Lisbon government would determine the length of time Cervera would remain at St. Vincent. That the king of Portugal had no intention of injecting himself into the Hispaño-American quarrel was shown at 5 P. M. April 28, when he signed the imperial proclamation of neutrality. That proclamation permitted the stay of belligerent vessels in Portuguese ports for a "short time" — an indefinite period, somewhat puzzling to the men who were

attempting to work out the grand problems of war. Cervera relieved our anxiety on this point, but gave us fresh cause for concern. On April 29 he left the Cape Verde Islands, and for almost two weeks the Navy Department floundered in a sea of ignorance as to his whereabouts.

VIII

THE COMING OF CERVERA'S FLEET AND SCHLEY'S MOVEMENT TO SANTIAGO

SPAIN'S naval division, under the command of Admiral Cervera, arrived off the island of Martinique on May 11, 1898. Thirty-six hours later, information of its appearance there reached Washington. Vital as was this intelligence, there was natural irritation because of the time lost in its transmission, and there was some disposition to attribute the delay to the pro-Spanish sympathies of the inhabitants of the French island. If so, redress was out of the question and recrimination was useless. The department, therefore, centered its attention upon Cervera's fleet. If afloat, there was constant menace to our blockade and to our coast; if destroyed or shut up in port, our blockade and coast were absolutely safe, Spain's defeat was assured, and Cuba would fall, like an apple, into our mailed hand.

There was no fear that Cervera would escape ultimate annihilation; rather was there an uneasy feeling that, in the game of strategy which had

begun, he might evade us at first and thus postpone the inevitable. The men who studied the war board at midnight of May 12-13, when news of Cervera's appearance reached them, were confident, however, that the dispositions arranged were such as to insure his apprehension within a reasonable time. Notification that he had been sighted was at once transmitted by cable and scout to Rear-Admiral Sampson, then returning to Key West from his trip to San Juan.¹ Commodore Schley, at Hampton Roads, was preliminarily instructed to get ready for sea, and a few hours later was directed to proceed to Charleston, S. C., where he would be in a better geographical position to reinforce Sampson or to protect the naval base at Key-West. The news of Cervera's presence was telegraphed to Commodore George C. Remey, the efficient commandant of the naval base at Key West, and twenty-four hours later he was ordered to remove all but the smallest blockading vessel from Cienfuegos and to advise the ships off the Cuban coast to be prepared in case of the appearance of the enemy.

These orders were intended to improve the strategic position of the units into which our fleet was divided; they were certainly in the direc-

¹ See Appendix, Exhibit E, for Sampson's report of attack on San Juan, Porto Rico.



Photograph by Hollinger

THE LATE REAR-ADMIRAL WILLIAM THOMAS SAMPSON

In command of the North Atlantic Squadron during the war



tion of concentration, which had been our policy from the outset of the war. When Schley was directed to sail for Charleston, the intention existed to make this merely a port of call. To Key West he was now ordered, and proceeded at 6 P. M. May 15. Sampson, in the mean time, had arrived off Puerto Plata, Santo Domingo, from which point he cabled to the department in regard to a press report that Cervera had returned to Cadiz, Spain, and to Commodore Remey, directing him to send the dynamite cruiser Vesuvius to San Juan, provided the Spanish division had been sighted in Peninsular waters. Freed from concern in regard to Cervera, Sampson proposed to return and capture the capital of Porto Rico, the weakness of which he had developed by a bombardment. To him, however, as it had to the department, the situation changed when he received dispatches from Washington, the first of which announced the appearance of Cervera off Martinique, and the second his arrival on May 14 at Curaçao. The later message directed Sampson to hasten to Key West.

When Cervera flashed across the horizon at Martinique, he added a new feature to the problem of search which we had been attempting to solve. At the time he sailed from the Cape Verde Islands, his objective was clouded by the

comparatively numerous points to which he might proceed; his arrival off Martinique established that either Cuba or Porto Rico was his destination. The coast of the United States was out of the question at the moment, because he *had* necessarily burned the greater part of his coal, and must replenish his supply before he could undertake any distant and offensive movement. It may be interpolated here, as characteristic of human nature, that with the appearance of Cervera in American waters, and with the departure of Schley from Hampton Roads, there was practically immediate cessation of demands from our ports for protection. On the day Cervera lay off Martinique, Sampson bombarded San Juan, Porto Rico, and, while we did not know it then, this fact, which Cervera learned through the commander of his torpedo-boat flotilla, as well as the information that he could not obtain coal at Fort de France, determined him to seek refuge elsewhere. Three days before Cervera's arrival, the department had been advised that colliers would probably meet him off the north coast of Venezuela. When he was reported at Curaçao, therefore, it seemed likely that this information was correct, and in the light of it the department studied the possibilities of the situation. The four ports, one of which must be

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his ultimate destination, were San Juan in Porto Rico, and Santiago de Cuba, Cienfuegos, and Havana in Cuba. The last named seemed out of the question, because to enter it he would have to encounter a superior force, and once in it he could not hope to escape the fleet which we were certain to assemble before it, and which would be able to operate from the base of Key West, only ninety miles away. Cienfuegos appeared the most probable in view of the report that he was carrying munitions essential to the defense of Havana with which Cienfuegos had railroad connection; but it was also probable that he might make Santiago de Cuba, and, after coaling, attempt a dash into the Gulf of Mexico, — a movement which, however, would have had little justification as there exist but two means of exit therefrom, each of which would have been promptly guarded by a squadron superior to his own.

This speculation indicates the way in which the department reasoned with respect to anticipated developments. How nearly it conformed to the views of the Spaniards themselves may be seen by a quotation from a book written by Captain Victor M. Concas y Palau, who served as commander of the Infanta Maria Teresa and Cervera's chief of staff. "The only harbors

which we could enter," Captain Concas wrote, "were: First, San Juan, which we had to discard altogether, because, as the United States admiral has said, with good reason, he could have taken it whenever he pleased. Second, Havana, which we supposed to be well guarded, and it was indeed, since the Americans have since said that it was considered highly improbable that we should attempt to enter Havana, and it must be understood that it was better guarded by the squadrons at a distance than those near by, because, in spite of the blockade, it would have been difficult to prevent ships, whether injured or not, from placing themselves under the protection of the batteries of the city, while an encounter at a distance from Havana meant the total destruction of our squadron. Third, Cienfuegos, which we also supposed guarded, especially since, our squadron having been sighted from the southward, it was from here that our passage to Havana could be most effectually cut off; moreover, this harbor, situated at the head of Cazones Bay, is a veritable rat-trap, very easy to blockade, and from which escape is more difficult than from any other harbor of the island. We knew there were torpedoes there, but no fortifications to amount to anything, and, moreover, the entrance is very

difficult to defend against a serious attack from the sea.

"On the other hand, we were twelve hundred and fifty miles distant from the latter harbor, while from Havana, or Dry Tortugas, and Key West, the enemy's base of operations, they had to make a run of only five hundred miles to cut us off. For this reason, Cienfuegos harbor was not seriously considered by us at that time. Later, when starvation stared us in the face at Santiago de Cuba, the former harbor was thought of as a possible solution, but not on the day of our arrival at Martinique.

"There remained as the only solution going to Santiago de Cuba, the second capital of the island, which we had to suppose, and did suppose, well supplied with provisions and artillery in view of the favorable conditions of the harbor entrance. Moreover, the southern coast of the island offered chances of sortie on stormy days and an open sea for operations, after we had refitted and made repairs. But as we also supposed that the fortifications there were not sufficient to afford us much support in the sortie, it was not at that time decided to go to said harbor in the hopes of a solution which would permit us to force our way into Havana harbor. The distance from Martinique to Santiago is

about nine hundred and fifty miles, so that the hostile squadron, which was at San Juan, could easily have arrived there ahead of us. But we never believed that it would do so, thinking that Admiral Sampson — though it has since come to light that he did not know of our arrival — would do what he actually did, namely, cover the remotest possibility, the entrance to the only fortified point, Havana.”

We knew nothing, of course, of the conditions under which Cervera was acting; but strategical and geographical considerations determined our plan of campaign. The moment the department learned of the enemy's presence in the Caribbean Sea, it turned the eyes of the navy — its scouts — in that direction. The Minneapolis was directed to proceed at her utmost speed to Caicos Bank, Bahamas, and cruise between that point and Monte Cristi, Haiti, and keep a sharp watch for the Spanish division. The St. Paul was ordered to cruise between Morant Point, Jamaica, and the west coast of Haiti. By means of these two vessels, the department believed it would prevent the unperceived passage of Cervera around the eastern end of Cuba. As an indication of how quickly the situation changed, the St. Paul, which was coaling at Hampton Roads, and had not carried out her original orders, was, a few hours

later, on May 14, directed to proceed to Key West, there to coal to her full capacity and await further instructions. The modification of the orders to the *St. Paul* was the result of the arrival of the Spanish division at Curaçao. Cervera's failure to proceed directly to Cuba, which was his objective, could be attributed only to his expectation of obtaining coal in the vicinity of Curaçao, and this inference was supported by the report of the impending arrival of colliers in the Gulf of Venezuela. The colliers did not arrive, and the armored cruisers *Infanta Maria Teresa* and *Vizcaya* took on four hundred tons of coal at Willemstadt. At Key West the *St. Paul* would be strategically in a central position — not much farther from the Windward Passage, to which she had first been ordered, than the Spanish division, and only two hundred miles from the Yucatan Passage, which the enemy might use in order to enter the Gulf of Mexico or to reach Havana, and would be available for service in any direction in which developments in the situation might require the presence of a fast scout. While the *St. Paul* was covering the distance of a thousand miles between Hampton Roads and Key West in four days, the department decided again to modify her orders. It was planned to dog the movements of Cervera

—to send three of our fast cruisers, one of which should be the *St. Paul*, the second the *Minneapolis*, and the third the *Harvard*, to the Gulf of Venezuela, there to get and keep in touch with him. Thus, wherever he should go, he would be preceded or followed by a vessel of superior speed, which, upon approach at a near-by cable station, would drop out of the race for a short time to communicate with the department or the commander-in-chief. The *St. Paul* was due at Key West, the *Minneapolis* was cruising, in accordance with the orders given, between Caicos Bank and Monte Cristi Island, and the *Harvard* was at St. Pierre, in which it at first had been believed she was blockaded by a Spanish torpedo-boat destroyer. It subsequently developed that the enemy's vessel, the *Terror*, had been compelled to enter Fort de France to make repairs. The *Terror* later crept to San Juan, where she was badly injured in an engagement with the *St. Paul*.

The plan to keep in touch with the Spanish squadron was not put into execution, because of the enemy's departure from Curaçao, and Rear-Admiral Sampson suggested a different disposition of the scouts. His instructions contemplated that the *Yale* and *St. Paul* should cruise between Morant Point, Jamaica, and Mole

St. Nicholas, Haiti, and Cuba, and the Harvard across the Mona Passage, which separates Santo Domingo and Porto Rico, and along the northern coast of the latter island. The department modified these orders so as to have the St. Paul and Yale proceed to Cape Haytien, Haiti, and there await further orders. The Yucatan Passage was patrolled by the Cincinnati and Vesuvius.

The orders and movements of the scouts have been given in detail because of the dependence placed in these ships by the department. Captain Concas has not, apparently, a high opinion of this class of vessels. "A question arises here, which has since been discussed," he says in his book, "but which at the time seemed very clear to us, namely, that it would be the telegraph rather than the hostile scouts that would betray us, and as a matter of fact that is what happened." But Captain Concas, when writing this passage, perhaps lost sight of the fact that it was essential to the United States to keep close track of Cervera's squadron wherever it should go, and that physical impossibilities prevented our consular or other agents from keeping constant touch with it. Had Cervera succeeded in leaving Santiago de Cuba before May 26, he would have been followed by one of five vessels, all fast and most of

which were of greater coal endurance than any of the ships of his own command. To one of these scouts, indeed, is due the credit of capturing the cargo of coal which in his possession would have enabled departure from Santiago.

In order to aid the reader it may be desirable now to state the position of the fighting ships of the opposing squadrons. Admiral Cervera was last reported as preparing to sail from Curaçao at 6 P. M. of May 15. Rear-Admiral Sampson received this information off Cape Haytien at 12.30 A. M. May 16. His squadron, which was pushing on as much as possible, was in a position at noon of May 17 to prevent the enemy from reaching Havana, via the Bahama Channel, without a conflict. Believing his personal presence more desirable at Key West, where he could get in communication with the department, he authorized Captain Robley D. Evans to take command of the squadron, and himself, in the New York, proceeded with all dispatch to that naval base. The Flying Squadron left Charleston for Key West at the same hour Cervera was reported as having left Curaçao, and, steaming at twelve knots, arrived at its destination at 12.30 A. M. May 18. The New York reached Key West at three o'clock in the afternoon of the same day.



Photograph by Gessford

REAR-ADMIRAL ROBLEY DUNGLISON EVANS

In command of the battle-ship Iowa during the war



Instructions from the department and Rear-Admiral Sampson had caused arrangements to be made at Key West for promptly coaling all the ships that might apply for fuel. Assured that Sampson's division was in a position to prevent Cervera's use of the Bahama Channel to reach Havana, the department determined to send the Flying Squadron to Cienfuegos. In selecting Cienfuegos as the station of this squadron, the department was actuated by the information that the Spanish vessels were carrying munitions of war necessary to the defense of Havana, and that the orders were imperative to reach either that or some other point in railroad communication with Havana. Cienfuegos appeared to be the only port fulfilling these conditions. Besides, it was necessary that the blockade there should be defended, and that the Yucatan Channel should be covered. Moreover, with Sampson before Havana and Schley at Cienfuegos, the armored vessels of the United States would be in a position from which they could strike either for the defense of our own blockade and coast, or engage in an offensive movement, combined or separate, against the enemy's squadron. We had learned from our consul at Curaçao that the Spanish ships were short of coal. With the meager coaling appliances at the Spanish ports not covered by our

ships, some days would have to be occupied by Cervera in refilling the bunkers of his vessels. If he sought refuge in San Juan, the plans adopted by the department would have resulted in his being promptly reported by a scout off that port. The receipt of this information would have been followed by instructions to Sampson and to Schley to proceed at full speed to Porto Rico. These instructions could have reached Sampson within six hours, and Schley within eighteen hours, the department having determined to hold fast cruisers at Key West for the special purpose of conveying them. It was calculated that in five days there would be before San Juan a force of such strength that Cervera could not escape annihilation. But if Cervera had succeeded in obtaining coal in such time that it might have been thought inadvisable to order our armored ships before San Juan, then he would have been followed by scouts, just as it was intended that he should be followed by the vessels stationed off Santiago. With our armored divisions off Havana and Cienfuegos, he would not have dared to proceed to either of those points, and had he attempted a demonstration against our Atlantic coast, Sampson would have started in pursuit and Schley would have been ordered to Havana to maintain the blockade of that harbor.

These movements would have restored the conditions existing prior to Cervera's appearance off Martinique. A dash to the north by the Spanish division would have been disadvantageous in one sense to Sampson, but disadvantageous also to Cervera, who would have been compelled to act on exterior lines — that is, follow a curve, while Sampson would have steamed along a straight line. Deprived of the Iowa, which had joined Schley, the efficiency of Sampson's division was sensibly diminished, and it was not until May 28, when the Oregon, which had reached Key West, had coaled, that it became tactically equal to the task of fighting and destroying such a swift foe as we believed Cervera's ships to be. But between May 19 and May 28 the only vessels under Sampson's command which were capable of maintaining a running fight with the Spanish division were his flagship, the New York, and the Indiana. The sluggish monitors could not hope to keep within range of the enemy unless, as Cervera steamed by, they succeeded in disabling some of his vessels. The plans of battle issued by Sampson were calculated to keep the Spaniards within fighting range of the monitors as long as possible. From what we know now of the condition of the hostile fleet, it is not unlikely that the New York and the Indiana could, without assistance, have

destroyed or seriously crippled the Spanish squadron; and the same result could perhaps have been achieved by the Oregon alone. But the estimate of efficiency which we placed upon the Spanish cruisers and torpedo-boat destroyers made questionable the ability of the Oregon or of the Indiana and New York to annihilate them.

Sampson placed his squadron in the Bahama Channel so as to intercept Cervera in case he eluded Schley and attempted to make Havana via the Windward Passage; and he subsequently endeavored to obey the department's instruction to cover that port from the westward also, in order to bring the Spaniards to action should they pass Schley off Cienfuegos and steam through the Yucatan Channel. No one better than Sampson understood the difficulties and perplexities of the commander of our squadron directed to remain off Havana. Yet he generously chose that station, though he had been authorized by the department to proceed to Cienfuegos, where it was believed the enemy would seek refuge.

Promptness had been displayed by Rear-Admiral Schley in making the voyage to Key West, and there was equal promptness in the coaling of his vessels upon arrival — both auguries of what should have been his future swiftness of move-



Photograph by Bachrach & Bro.

REAR-ADMIRAL WINFIELD SCOTT SCHLEY

In command of the Flying Squadron during the war



ment in order to insure the early overtaking of Cervera.

Upon his arrival, Schley had been instructed, through the commandant of the naval base, to sail for Havana to support the blockade until the appearance of the naval force attached to Sampson's command. Before this order could be observed, Rear-Admiral Sampson directed him to "proceed with dispatch (utmost) off Cienfuegos." Sampson also directed him to establish, "with the least possible delay," a blockade "as close as possible." The Flying Squadron sailed at eight o'clock on the morning of May 19, and arrived and established a blockade off Cienfuegos at seven o'clock on the morning of May 22, requiring almost three days to cover this distance. The Iowa and the Dupont sailed in company from Key West at 11.20 of the morning of May 20, twenty-seven hours after the departure of the Flying Squadron, and proceeded via Havana. The Dupont arrived at Cienfuegos early in the morning, and the Iowa at 1.30 P. M. of May 22. The battle-ship thus made the voyage in two hours over two days, and reached its destination only six and a half hours after Schley. This absence of dispatch on the part of Schley was certainly contrary to his instructions, and might have had unfortunate results. Had Cer-

vera at Curaçao selected Cienfuegos as his destination, he could, proceeding with the same speed he employed to reach Santiago, have entered the former port some hours before Schley arrived.

Thirty miles from Key West, the Flying Squadron sighted the Marblehead and Eagle, which formed a division under the command of Captain Bowman H. McCalla. Schley knew that McCalla had been at Cienfuegos, but did not attempt to communicate with him, and McCalla, believing the Flying Squadron bound for the Caribbean Sea, did not, except through the Eagle, seek to acquaint the commodore with the situation at the Cuban port. All this was to have decidedly serious consequences, which might, under certain circumstances, have proved disastrous. That the failure to stop the Marblehead was not because of any desire to proceed "with dispatch (utmost)" is shown by the fact that when the commodore subsequently spoke to the Cincinnati, he stopped his squadron, and called Captain Colby M. Chester, commanding the cruiser, on board his flagship, though the latter had no information of special importance to communicate.

Between thirty and forty-five miles from Cienfuegos Schley reports, and he is corroborated by

one of the officers of the Brooklyn, that he heard guns fired with the cadence of a salute. As Cienfuegos had been reported as the destination of the enemy's division, Schley regarded the guns as the welcome of Spanish forts and ships to the incoming Spanish men-of-war, and this impression was strengthened when he subsequently sighted smoke in the harbor.

At dawn of May 19, the Spanish squadron entered Santiago de Cuba. "By a miracle," to again quote Captain Concas, "it arrived there intact, and there was nothing to be done but to suffer the consequences of its departure [from Cape Verde]." Through spies in Havana the efficient chief signal officer of the army, Brigadier-General A. W. Greely, learned on the same day that the Spanish division was "probably" at Santiago. The Minneapolis, St. Paul, St. Louis, Harvard, and Yale were at once instructed by cable to proceed off Santiago, to watch carefully and to keep in communication with the Spanish division, reporting as often as possible to the department. These orders were received by all the ships except the St. Louis, Captain Goodrich commanding, the whereabouts of which was unknown, and the failure to reach her was doubly annoying in view of the fact that she had only recently come from Santiago and Guantanamo,

where she had done very gallant service in cutting cables, and was consequently familiar with conditions at both those ports.

While the information received in Washington concerning Cervera's presence in Santiago was not absolutely trustworthy, it was sufficiently reliable to justify the taking of risk, and it was determined to order Schley to Santiago. There were some disposed to criticise this decision, but a choice had to be made between Cienfuegos and Santiago, and, regrettable as would have been the entrance of the Spanish ships into the former port, it was believed that Schley would be able to move swiftly and engage the enemy's fleet if it tried to make Cienfuegos from Santiago, or to blockade it in the latter harbor in case of its failure to escape from it before our ships arrived.

Sampson was therefore informed that the report of Cervera's arrival at Santiago "might very well be correct," and he was strongly advised "to send word immediately by the Iowa to Schley to proceed at once off Santiago de Cuba with his whole command, leaving one small vessel off Cienfuegos." Sampson received this message early in the morning of May 20, and at once prepared instructions to Schley. Sampson also sent by the Iowa a memorandum from Comman-

der McCalla, describing a good landing-place for troops at Savanilla Point, a short distance from Cienfuegos. This memorandum stated that the Cuban insurgents had perfect knowledge of what was going on inside the city, and gave information of the Spanish fortifications defending the place.

These dispatches were delivered to Commodore Schley immediately after the arrival of the Iowa and Dupont. Casting, as they did, a doubt upon the presence of the Spanish ships in Cienfuegos, his efforts should have been redoubled to settle beyond question whether the enemy were in that port. On May 22 he stood in toward the entrance of the harbor, and by means of glasses attempted to ascertain whether the Spanish ships were inside. He also sent a lookout aloft. But the harbor of Cienfuegos is so formed that it is impossible to examine it thoroughly from the sea, and he gained no information of value.

Sampson received corroboration of the report of Cervera's presence in Santiago, and at three o'clock on the morning of May 21 prepared new instructions to Schley, which were sent by the Marblehead. In this communication Schley was informed that the Spanish squadron was probably at Santiago de Cuba. "If you are satisfied that they are not at Cienfuegos," Sampson wrote,

"proceed with all dispatch, but cautiously, to Santiago de Cuba, and, if the enemy is there, blockade him in port." Concerned about the early delivery of the orders sent by the Marblehead, Sampson ordered the gunboat Hawk to convey a duplicate to Schley, and accompanied it by a memorandum which left no doubt of the presence of Cervera at Santiago. "It is thought that the inclosed instructions will reach you by 2 o'clock A. M. May 23," Sampson said. "This will enable you to leave before daylight (regarded very important), so that your direction may not be noticed, and be at Santiago A. M. May 24."

It is now necessary to shift the scene to Schley at Cienfuegos. On the night of May 22 he noticed lights on shore, arranged in line and having the appearance of signals. These lights appeared again on the night of May 23. They were noticed by other officers of his command, and caused some speculation. Nothing was done to ascertain what they indicated, and no attempt was made to send a boat to the shore to communicate with the insurgents, who, as the McCalla memorandum stated, were in the vicinity of Cienfuegos. In view of this memorandum, it is surprising that Commodore Schley, in official communications, should have stated that he "had no knowledge

that there were any insurgents about Cienfuegos who were friendly to us until the Marblehead arrived on the 24th." Schley claims that he did not receive the McCalla memorandum by the Iowa or Dupont, though he admits it reached him at 8.15 A.M. May 23, by the Hawk. The Hawk delivered her dispatches before the Marblehead arrived. In order to save time, Sampson accompanied the Hawk some eighteen miles from Key West, writing, as his flagship and the dispatch-boat sped along, the instruction urgently directing Schley to hasten to Santiago. Imperative as was this instruction, the only thing done on May 23 to ascertain whether the Spanish ships were within the harbor of Cienfuegos was to permit the entrance of the British steamer Adula, which carried authenticated papers from a United States consul authorizing her to receive as passengers any persons who desired to leave Cienfuegos. Her commander informed Schley that he had passed the lights of seven ships, which he took to be Spanish, near Jamaica, on May 18, and that a war bulletin published at Kingston announced the arrival of Cervera's fleet at Santiago on May 19, and its departure from that point on the following day. From the refugees on board when the Adula should come out, Schley expected to get information as to whether or not the Span-

ish ships were in the harbor, but she was not permitted to leave while he was in sight.

The Marblehead, accompanied by the auxiliary gunboats Vixen and Eagle, reached Cienfuegos on May 24 and delivered dispatches; and Captain McCalla of the Marblehead told Commodore Schley that the Spanish force was reported at Santiago. McCalla asked Schley if he had seen any lights on shore, to which Schley replied in the affirmative, and McCalla then stated that they were signals which he had arranged with the insurgents before his departure from Cienfuegos. The mistake of Schley in failing to speak McCalla thirty miles from Key West, when he knew that that officer had been off Cienfuegos, must have been apparent to him then. Receiving permission from Schley, McCalla, in the Marblehead and accompanied by the Eagle, went to Savanilla Point. He promptly learned from insurgents there that Cervera was not in the harbor of Cienfuegos, and he sent the Eagle post-haste to convey this information to the commodore.

Schley received the report of Commander McCalla between three and four o'clock on the afternoon of May 24. He immediately prepared dispatches, which were forwarded to the commander-in-chief and to the commandant of the



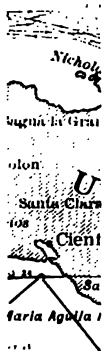
Photograph copyright 1961 by E. Muller

CRUISER BROOKLYN

Passing under the Brooklyn Bridge



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naval base at Key West. In his message to the department he stated he had ascertained from insurgents that the Spanish fleet was not in Cienfuegos, and added that, as it was not practicable to coal the Texas from the collier at Cienfuegos on account of the swell, he would "proceed to-morrow for Santiago de Cuba." This delay was hardly in accord with the demands of the situation, or with the instructions he had received by the Hawk on the 23d and the Marblehead on the 24th. "Spanish squadron probably Santiago de Cuba," the dispatch by the Marblehead read. ". . . If you are satisfied that they are not at Cienfuegos, proceed with all dispatch, but cautiously, to Santiago de Cuba, and, if the enemy is there, blockade him in port." The instruction by the Hawk was explicit, imperative. Schley, however, reconsidered his determination to wait until the morrow. He left for Santiago about 7.45 in the evening of May 24.

Such was the course of events at Cienfuegos. We know it now, when all the facts have come to light through the investigation made by the now famous Schley Court of Inquiry in 1901. We did not know it then. Then the delay was inexplicable, and the failure to ascertain without loss of time whether Cervera was at Cienfuegos

was a matter of the keenest anxiety in Washington. Each day's information, after the first report that Cervera was probably at Santiago, increased the probability of his presence there, and the certainty that, if not already coaled and ready to sail, he was straining every nerve to get in condition to leave his port of refuge before we could assemble an overwhelming force before it. For us, in the department, it was a time of nervousness, but of hope allied with apprehension. Cervera's escape would have been a distinct blow to our prestige. We would have overhauled him in the end, but his first move would have been successful, and Europe would have hailed it as an American defeat.

This was the feeling of the department on May 25, when it received a dispatch from Schley, filed at the cable station at Mole St. Nicholas, Haiti, on the same day. This message had been brought by the Harvard, to which it had been given by the Scorpion, and had been sent by Schley in obedience to Sampson's instructions to communicate with the scouts off Santiago. Schley's dispatch contained information of events of May 21 and 22. He was unable to state whether the Spanish fleet was in Cienfuegos or not, and he anticipated difficulty in coaling his ships from the collier Merrimac, laden with 4500

tons of coal, which had been sent to him by Sampson. Commodore Remey at Key West received on May 26 and immediately transmitted to the department Schley's message of May 24, stating that he had learned that the Spanish fleet was not at Cienfuegos and that he would move eastward on May 25. "On account of want of coal," Schley added, "I cannot blockade."

The department was decidedly puzzled by this second dispatch. Why had Schley not obeyed the instruction sent to him by Sampson under date of May 21 to proceed to Santiago? Why, after having learned that the enemy was not in Cienfuegos, did he not move immediately upon Santiago instead of waiting until the morrow? Effort was made but it was impossible to obtain additional information of Schley's purpose. Besides the dispatches to the department, Schley had cabled to Sampson a duplicate of his message sent by the Harvard to the Secretary of the Navy, and, on May 26, the commander-in-chief received from him two letters dated May 23. In one of his letters Schley stated, "Am not satisfied that the Spanish squadron is not at Cienfuegos. The large amount of smoke seen in the harbor would indicate the presence of a number of vessels, and under such circumstances

it would seem to be extremely unwise to chase up a probability at Santiago de Cuba reported via Havana, no doubt as a ruse. I shall therefore remain off this port with this squadron, availing myself of every opportunity for coaling and keeping it ready for any emergency." The second letter from Schley closed: "I think I have them here almost to a certainty." Commodore Schley's belief was not that of his subordinates. Lieutenant John Hood, commanding the *Hawk*, who brought these communications from him, advised the commander-in-chief that a good number of officers "do not believe the Spaniards are there at all, although they can only surmise." It was at 1 P. M. of May 27 that Sampson, who was in St. Nicholas Channel, received Schley's dispatch of May 24 in regard to the establishment of the fact that the Spaniards were not in Cienfuegos and of his purpose to sail on May 25 for Santiago.

These dispatches caused anxiety to the department and Sampson. Immediately after the receipt of the message brought by the *Harvard*, the department cabled to the commanding officer of that vessel, under date of May 25, directing him to proceed at once and inform Schley and also the senior officer of the scouts off Santiago that the information at hand indicated that the

Spanish division was still at Santiago. Schley was to be informed that the department looked to him "to ascertain facts and that the enemy, if therein, does not leave without a decisive action." He was advised that Cubans reported landing-places five or six miles west from the mouth of the harbor, at which insurgents would probably be found, and that from the heights surrounding the harbor every vessel in port could be seen. To relieve his anxiety concerning coal, he was informed that a fresh supply would be sent to Mole St. Nicholas, and it was suggested that his squadron and the Harvard could coal from the collier Merrimac to the leeward of Cape Cruz, in Gonaives Channel, or at Mole St. Nicholas. Sampson, ignorant of this action of the department, also acted. On the morning of May 27, he sent the Wasp, via Cape San Antonio, to Cienfuegos, with instructions to inform Schley that "every report, and particularly daily confidential reports, received from Havana, up until May 25, state that the Spanish squadron had been at Santiago since May 19." The Flying Squadron was ordered to proceed with all possible dispatch to Santiago and establish a blockade, unless upon arrival positive information were obtained of the departure of the Spanish ships, in which event it was to follow in pursuit. This dispatch

by the Wasp did not reach Schley at Cienfuegos.

Had Schley been at Cienfuegos at the time the Wasp arrived, he could have reached Santiago before Sampson could have done so; the latter, therefore, delayed his squadron in St. Nicholas Channel. Sampson determined personally to proceed to Key West, coal, and, with the authority of the department, sail for Santiago. Before his arrival at the naval base he communicated to Captain W. M. Folger, commanding the cruiser New Orleans, an instruction to convoy the collier Sterling through the Bahama Channel, and then, leaving her, to go with all dispatch to Santiago. "You will communicate with Commodore Schley," Captain Folger was instructed, "and direct him to remain on the blockade of Santiago at all hazards, assuming that the Spanish vessels are in that port." It was suggested to Schley that, to prevent the escape of the enemy's division, the Sterling should be sunk across the narrowest part of the channel leading into the harbor. "Inform Commodore Schley," Sampson added, "that the details of this plan are left to his judgment. In the mean time he must exercise the utmost care that none of the vessels already in port are allowed to escape, and say to the commodore that I have the utmost confidence in his ability to carry

this plan to a successful conclusion, and earnestly wish him good luck." The idea of sinking a vessel across the entrance of Santiago de Cuba had been considered by the Naval War Board and had received its approval. With the mouth of the harbor closed, the escape of Cervera would have been impossible, and the capture of his ships could have been effected by the army, a division of which the War Department was at the time preparing to embark.

The Navy Department believed with Sampson that on May 24 the Flying Squadron had arrived off Santiago. But on May 26 we learned that not until May 24, three days after May 21, the date reported by Schley as that of his arrival off Cienfuegos, though May 22 was the date upon which he established a blockade, had the commodore finally and definitely ascertained that the Spanish division was not in that port, and this notwithstanding the receipt of information from Washington and the commander-in-chief indicating it was at Santiago. And when satisfied Cervera was not at Cienfuegos, he cabled that he would sail for Santiago, not immediately, as his instructions required, but the next day, and that, on account of the short coal supply of his ships, he could not blockade Santiago! There was no fast scout available, but on the chance of one

soon touching at Mole St. Nicholas, the department cabled on May 27 to that point for delivery to the next American man-of-war to arrive:—

Proceed immediately and deliver following to Schley: The most absolutely urgent thing now is to know positively whether the Spanish division is in Santiago de Cuba harbor, as, if so, immediate movement against it and the town will be made by the navy and division of about 10,000 United States troops, which are ready to embark. You must surmount difficulty regarding coaling by your own ingenuity and perseverance. This is a crucial time, and the department relies upon you to give quickly information as to Cervera's presence, and to be all ready for concerted action with the army. Two colliers have been ordered to St. Nicholas Mole, and your ships might coal singly there, or in Gonaives Channel, or to leeward of Cape Cruz. Sampson will convoy the army transports, probably coming around by the Windward Passage. Yankee will join you and the Minneapolis will go north. Cervera must not be allowed to escape. LONG.

That the apprehension of the Navy Department and the commander-in-chief regarding the prospective flight of the Spanish division from Santiago de Cuba was well founded is demonstrated by the official dispatches of Admiral Cervera, which were published after the war. On May 23 he was advised that twelve hostile ships were off Cienfuegos and that the *Indiana*, *New York*, and other vessels had gone from

Havana to the windward, leaving only four gunboats on the blockade of that port. Later in the same day Cervera received secret information of the positions of our ships. He determined to sail from Santiago at daybreak the following morning for San Juan, Porto Rico, but it was decided at a subsequent meeting of the commander-in-chief and his captains that, "owing to the location of the hostile forces and their number and strength, it is considered impossible to carry out said plan." Contributory to this decision was the fact that four American ships lay off the harbor, the strength of which Cervera did not know, but which we knew to be simply vulnerable scouts. Having defective instruments and inadequate resources Cervera lost heart, and on May 25 he cabled to Madrid that his division was blockaded. Yet Schley had not arrived. Cervera felt, however, he could hope to gain little by leaving Santiago. "If another opportunity presents itself," he wrote on May 25, "I intend to try and take advantage of it, but as I cannot hope with these scant forces to attempt any definite operations, it will only be a matter of changing this harbor for another where we would also be blockaded." On May 26 Cervera again convened his captains, and it was unanimously decided that the squadron should sail in the afternoon for San Juan.

In the mean time three hostile ships were sighted, and a pilot expressed the opinion that in going out the Colon might sustain injury on account of her draft by striking a flat rock in the channel. Five of Cervera's captains voted against departure; two urged that they should immediately sail. Cervera approved the opinion of the majority, because he did not consider the circumstances so extreme as to make it necessary to risk the loss of one of his ships.

Cervera's hesitation was unknown to the department and to our officers. We believed him feverishly working to repair and coal his ships, as indeed he was. The coal supply of our scouts off Santiago was running low. If Schley arrived off that port and failed to stay, there was danger, it was believed, that the United States would be without a vessel in its vicinity to make report of Cervera's departure. Consequently we would be absolutely in ignorance as to the direction he had taken, and the problem of search would have to be worked out all over again.

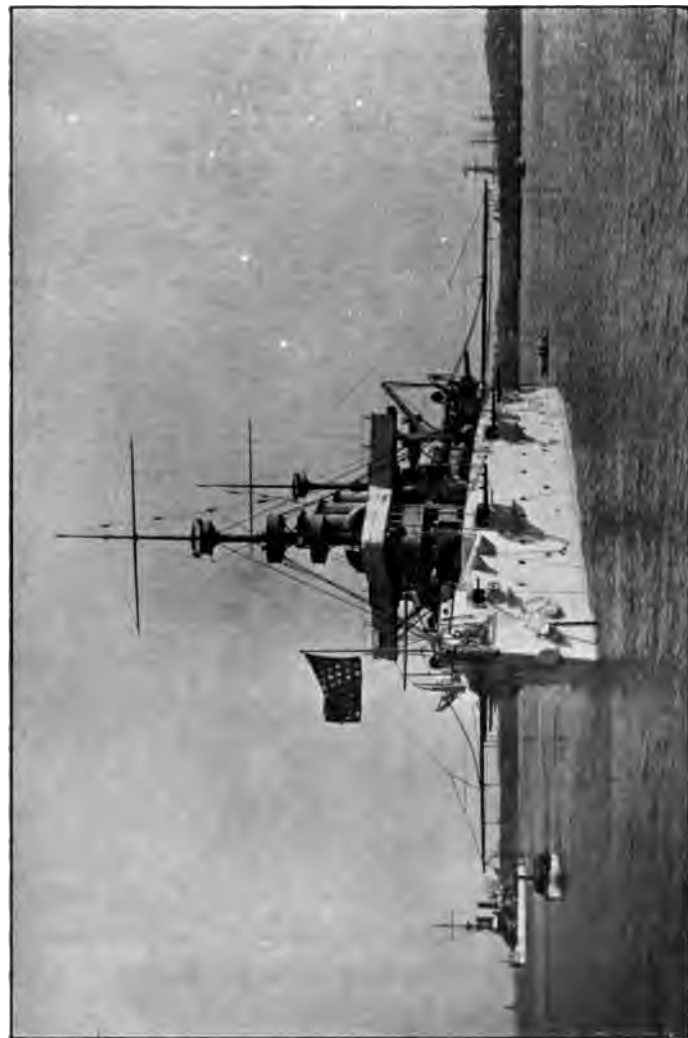
It is advisable now to follow Schley again. He had been instructed by order of May 21 to "proceed with all dispatch, but cautiously, to Santiago de Cuba." On the same day Sampson had advised him to leave Cienfuegos before daylight May 23, so that he could arrive at Santi-

ago on the morning of May 24. Leaving the gunboat Castine to maintain the blockade at Cienfuegos, Schley sailed from that point about 8 P. M. of May 24, his heavy ships in column of vessels, with the lighter ships on his flanks. Heavy rolling caused the forward compartment of the gunboat Eagle to fill with water, causing reduction of her speed, and the weather on the following day, May 25, was bad. In a battle with the Spanish division the little Eagle would have been of no value, and Commodore Schley, in view of the paramount necessity of getting in contact with the Spanish fleet, should have left her to take care of herself and have gone on with his fighting ships. Instead, he reduced the speed of the squadron in order to permit the Eagle to keep up with it. On the following day, when the weather had moderated, and the Eagle's compartments had been freed from water, he ordered her to Jamaica.

The orders of Schley were to go to Santiago de Cuba. He failed to obey them promptly. At 5.30 P. M. of May 26 he was twenty-two miles to the southward of the port named in his instructions. The distance Sampson expected Schley to cover within thirty hours actually occupied more than forty-five hours, and even then the Flying Squadron was not at Santiago.

The scouts Minneapolis, Yale, and St. Paul joined Schley at this time, and a few minutes later the commodore was informed that an accident had occurred to a part of the engine of the collier Merrimac. Captain Charles D. Sigsbee, who commanded the St. Paul, informed Schley that the scouts knew nothing positively or absolutely about the movements of the Spanish fleet, and says he recited certain events to show there was a probability that Cervera was in Santiago at the time. But, whether unnecessarily uneasy about the coal supply of his vessels, or because of the accident sustained by the Merrimac which increased the difficulty of coaling though the conditions of wind, sea, and weather were sufficiently favorable for that operation, or for what inexplicable reason, — inexplicable to

his own officers at the time as well as to everybody else since, — Schley, at 7.45 P. M. May 26, signaled to his squadron: "Destination, Key West, via south side of Cuba and Yucatan Channel, as soon as collier is ready; speed nine knots." The Yale took the Merrimac in tow, and the squadron actually turned back from its almost reached goal and proceeded westward until 11.15 P. M., when, the tow-lines having parted, it stopped and drifted until 3.40 P. M. of May 27. While the squadron was lying at the



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CRUISER NEW YORK



drift of wind and current, the Harvard arrived at 9.30 A. M. of May 27, and delivered the department's dispatch above quoted, stating that all indications pointed to the presence of the Spanish ships in Santiago de Cuba, which he was directed to confirm if true. Schley answered this message three hours later by a cablegram which caused consternation when it reached the department on May 28. This message may be classed as one of the most infelicitous in history, and it is worth quoting:—

Merrimac's engine is disabled, and she is helpless; am obliged to have her towed to Key West. Have been absolutely unable to coal the Texas, Marblehead, Vixen, and Brooklyn from collier, owing to very rough seas and boisterous weather since leaving Key West. Brooklyn is only one in squadron having more than sufficient coal to reach Key West. Impossible to remain off Santiago in present state of coal account of the squadron. Not possible to coal to leeward of Cape Cruz in summer owing to southwest winds. Harvard just reports to me she has only coal enough to reach Jamaica, and she will proceed to Port Royal. Also reports only small vessels could coal at Gonaives or Mole, Haiti. Minneapolis has only coal enough to reach Key West, and same of Yale, which will tow Merrimac. It is to be regretted that the department's orders cannot be obeyed, earnestly as we have all striven to that end. I am forced to return to Key West, via Yucatan Passage, for coal. Can ascertain nothing certain concerning enemy. Was obliged to send Eagle to Port Antonio, Jamaica, yesterday, as she had only twenty-seven

tons of coal on board. Will leave St. Paul here. Will require 9500 tons of coal at Key West.

I remember well the receipt of this dispatch. I was with President McKinley at the army review at Camp Alger. His face fell when I showed it to him. It was incomprehensible—the first flinching of the campaign. It was the darkest day of the war. It was the lack, not of personal courage, but of that unswerving steadiness of purpose and nerve which is the essence of supreme command, and of which Farragut is an example. Undoubtedly it is a fair criticism on the department that Schley was not relieved at once and an inquiry ordered. But it was not then known what his situation was, or that the situation had not been as stated in his excusatory telegram, and it was taken for granted that the commander-in-chief, Sampson, who was near at hand, would take proper action, which, had he been senior in service, he would probably have done, and not doing which he too failed to do his duty.

The situation of his command appeared at the Schley Court of Inquiry in 1901 not to have been as Schley reported it. At noon on May 27 his vessels had coal enough to have remained on blockade duty off Santiago de Cuba—the Brooklyn for twenty-six days, the Iowa for sixteen

days, the Massachusetts for twenty days, the Texas for ten days, the Marblehead for five days, and the Vixen for twenty-three days, and then they would have had sufficient fuel to reach Gonaives or Cape Cruz, where they could have refilled their bunkers from the Merrimac which contained 4350 tons of coal. The amount of coal required to completely supply these ships was 2750 tons. Schley must have known when he sent his dispatch that the Iowa, Castine, and Dupont had coaled at Cienfuegos on May 23, and the Massachusetts and Castine on May 24. Permission had been asked by the Texas on May 23 to coal, but she was refused, and ordered to coal on the following day. This order was subsequently revoked. Indeed, the Texas and Marblehead did actually coal from the Merrimac at sea off Santiago on the evening of May 27 and the morning of May 28; and the Massachusetts and Vixen on May 29, the Brooklyn and Iowa on May 30, and the Brooklyn, Texas, and Marblehead on May 31. Thus there were but two days — the 25th and the 26th — when no coal was transferred from the collier to the men-of-war, and the failure to take fuel on these days was not due wholly to rough seas and boisterous weather or to the helplessness of the Merrimac, but to the fact that the squadron was under way. Captain

McCalla, when at Cienfuegos, had informed Commodore Schley that coaling operations could be conducted in the vicinity of Cape Cruz, and that no difficulty would be experienced in coaling on the south side of the northern promontory of Haiti. Yet, in spite of the fact that there was ample coal in the bunkers of his fighting ships, that attached to his command was a collier carrying an abundant supply of fuel, that the weather was not too rough for coaling his vessels, and, finally, that near by there were points sheltered from the wind at which coaling could be conducted with safety, Schley cabled the department: —

It is to be regretted that the department's orders cannot be obeyed, earnestly as we have all striven to that end.

Another phase of Schley's action which seriously concerned the department was his statement that the Harvard would proceed to Port Royal, the Minneapolis to Key West, and that the Yale would accompany him, leaving only the St. Paul, with a depleted coal supply, off Santiago. We did not know until later that for nearly twenty-four hours — that is, from 6 P. M. May 26 to 5 P. M. May 27 — not a scout was off the harbor of Santiago. But we did know that

the St. Paul, if the Spanish fleet attempted to escape, could not keep touch with it or make frequent reports to the department, and our plan of constantly following Cervera was in danger of being frustrated by the orders of the commander of the Flying Squadron.

Schley had been instructed that the department was looking to him to ascertain whether the Spanish division was at Santiago. He excuses his action in deliberately turning his ships away from that port and starting back for Key West on the ground that Captain Sigsbee told him he had not seen the enemy, and that a pilot, whom Captain Sigsbee and Schley himself did not at first fully trust, expressed the opinion that the Spanish ships could not enter the harbor because of their length. Captain Sigsbee told Schley that he had captured a collier bound for Santiago with coal for Cervera, and this certainly indicated that, if the Spanish division were not at Santiago, that port was its destination. Whatever the opinions expressed by the commander of the scout and by the pilot, however, they were based upon negative information, and Schley's first duty was to establish beyond the shadow of a doubt whether Cervera was in the harbor.

The squadron, again, strange to say, resumed its retrograde westward course at 3.40 P. M. of

May 27, and steamed thirty-three miles, stopping once more at 7.15 P. M., when the Texas went alongside of the Merrimac and coaled. The squadron again drifted until 1 P. M. of May 28, when Schley signaled to the fleet to turn again and proceed to Santiago. He arrived at a point seven miles south of the harbor at 6 P. M. May 28, and established a blockade. Had he obeyed the orders of Sampson, he would have reached that point on the morning of May 24. The result of his vacillation and lack of push was that Cervera had had several days in which to coal and make repairs to the engines of his ships. In the early morning of May 29, the day following Schley's arrival, he discovered the Colon and Teresa and two torpedo-boat destroyers moored inside of the Moro.

Schley's arrival at Santiago and his discovery of the Spanish vessels were not known in Washington until late in the evening of May 29. The receipt of his dispatch announcing his purpose to go to Key West, imposed upon the department the necessity of taking action which would repair the grievous, and it might be the disastrous, mistake he had made. Following the receipt of his message, the department cabled to the Harvard for delivery to Schley, "as soon as possible: utmost urgency," an instruction to remain off San-

tiago unless it were unsafe to do so or unless the Spanish division were not there. To Rear-Admiral Sampson a dispatch was sent giving the contents of Schley's cable, and asking him how soon after arrival of Schley at Key West could he reach Santiago with the New York and Oregon, Indiana, and some lighter vessels, and how long could he blockade that port. Sampson promptly replied:—

Answering the first question, three days. I can blockade indefinitely. Think that I can occupy Guantanamo. Would like to start at once with New York and Oregon. Do not quite understand as to the necessity of awaiting arrival of Schley, but I would propose meeting and turning back the principal part of the force under his command.

Before the New York and Oregon could leave Key West, another dispatch came from Schley saying that he would hold on. But though he also reported that he had sighted only four of the Spanish ships, it was believed that the naval base at Key West could be safely left undefended, and that the battleship Indiana and the monitor could prevent the remaining Spanish ships, if they were not at Santiago, from entering Havana. Schley was advised that Sampson was coming, and he was urged to locate the missing armored cruisers. Though the Colon and other

vessels of the Spanish squadron were discovered lying in the entrance of the harbor on the morning of May 29, it was not until 1.30 P. M. of May 31 that an attempt was made to capture or destroy them. The department's orders to the commander-in-chief, a copy of which had been furnished to Schley, but which he denies having received, authorized him to expose his ships to the heaviest guns of land batteries if there were Spanish vessels of sufficient military importance protected by these guns to make an attack advisable. Instead of approaching within effective range of the enemy, Schley signaled that the Massachusetts, Iowa, and New Orleans should open fire at a range of 7000 yards, and this range increased until it was 11,000 yards. At this great distance, our fire, as well as the return fire of the Spanish vessels and batteries, was ineffective. The chance of hitting the enemy was still further diminished by the speed — ten knots — of the American men-of-war and the brief time — four minutes — each had to sight and fire its guns at the targets, partially protected by the bold headlands of the harbor.

Sampson arrived off Santiago at 6 A. M. on the morning of June 1. "The importance of absolutely preventing departure of Spanish squadron of paramount importance," he telegraphed to the

department from Key West on May 28, "and demands the prompt and efficient use of every means." The disaster which Cervera had predicted as far back as 1897 was looming portentously upon the Spanish horizon. Upon arrival at Santiago, Sampson established a blockade so strict that the Spanish sentinels could hear the cries of the watch on the American ships. Cervera declared that, with the harbor entrance blockaded as it was during that fateful month of June, it was disaster to leave. "It was absolutely impossible to go out at night," he wrote after the war, "because in this narrow channel, illuminated by a dazzling light, we could not have followed the channel and would have lost the ships, some by running aground, others by colliding with their own companions. But, even supposing that we had succeeded in going out, before the first ship was outside we should have been seen and covered from the very first with the concentrated fire of the whole squadron."

It is easy, in the light of the foregoing facts, to see the propriety of the opinion of the Schley Court of Inquiry, which upon the points testified to was unanimous, except as not very materially modified in one or two minor details by Admiral Dewey in the memorandum which he submitted with that opinion. This modification, as will be

seen, relates to the degree of dispatch with which the passage from Key West to a point twenty-two miles south of Santiago was made, to the steamer Adula, and to the blockades of Cienfuegos and Santiago. In all other respects the opinion of the court stands on the record as unanimous.

The opinion of the court is as follows:—

Commodore Schley, in command of the Flying Squadron, should have proceeded with the utmost dispatch off Cienfuegos, and should have maintained a close blockade of that port.

He should have endeavored on May 23, at Cienfuegos, to obtain information regarding the Spanish squadron by communicating with the insurgents at the place designated in the memorandum delivered to him at 8.15 A. M. of that date.

He should have proceeded from Cienfuegos to Santiago de Cuba with all dispatch, and should have disposed his vessels with a view of intercepting the enemy in any attempt to pass the Flying Squadron.

He should not have delayed the squadron for the Eagle.

He should not have made the retrograde turn westward with his squadron.

He should have promptly obeyed the Navy Department's order of May 25.

He should have endeavored to capture or destroy the Spanish vessels at anchor near the entrance of Santiago Harbor on May 29 and 30.

He did not do his utmost with the force under his command to capture or destroy the Colon and other vessels of the enemy which he attacked on May 31.

By commencing the engagement on July 8 with the port battery, and turning the Brooklyn around with port helm, Commodore Schley caused her to lose distance and position with the Spanish vessels, especially with the Vizcaya and Colon.

The turn of the Brooklyn to starboard was made to avoid getting her into dangerous proximity to the Spanish vessels. The turn was made toward the Texas, and caused that vessel to stop and to back her engines to avoid possible collision.

Admiral Schley did injustice to Lieutenant-Commander A. C. Hodgson in publishing only a portion of the correspondence which passed between them.

Commodore Schley's conduct in connection with the events of the Santiago campaign prior to June 1, 1898, was characterized by vacillation, dilatoriness, and lack of enterprise.

His official reports regarding the coal supply and the coaling facilities of the Flying Squadron were inaccurate and misleading.

His conduct during the battle of July 3 was self-possessioned, and he encouraged, in his own person, his subordinate officers and men to fight courageously.

GEORGE DEWEY,

Admiral U. S. N., President,

SAM. C. LEMLY,

Judge-Advocate-General, U. S. N., Judge-Advocate.

The memorandum of Admiral Dewey is as follows:—

In the opinion of the undersigned the passage from Key West to Cienfuegos was made by the Flying Squadron with all possible dispatch, Commodore Schley having

in view the importance of arriving off Cienfuegos with as much coal as possible in the ships' bunkers.

The blockade of Cienfuegos was effective.

Commodore Schley in permitting the steamer Adula to enter the port of Cienfuegos expected to obtain information concerning the Spanish squadron from her when she came out.

The passage from Cienfuegos to a point about twenty-two miles south of Santiago was made with as much dispatch as was possible while keeping the squadron a unit.

The blockade of Santiago was effective.

Commodore Schley was the senior officer of our squadron off Santiago when the Spanish Squadron attempted to escape on the morning of July 3, 1898. He was in absolute command, and is entitled to the credit due to such commanding officer for the glorious victory which resulted in the total destruction of the Spanish ships.

GEORGE DEWEY,

Admiral, U. S. N., President.

With regard to the final paragraph in the above memorandum of Admiral Dewey as to the question of command in the later battle of Santiago, July 3, 1898, on which it will be noted that the full court in its opinion expressed no view, and reference to which more properly belongs to a later chapter, this question not only had not been before the court, but the court, through Admiral Dewey himself as its spokesman, had emphatically refused to consider it or hear evidence with regard to it. That, in face of this fact, he should, unlike his associates, pass

judgment upon it, has been a subject of surprise and criticism, as it left him in the position of agreeing with his associates on all the more important matters which were considered by him and them, and of then expressing an opinion, while his associates properly expressed none, on a matter vital to a brother officer on which the full court had refused to hear any evidence on either side.

There have been few more notable trials than that before this Court of Inquiry. It was composed of three distinguished naval officers, Admiral Dewey and Rear-Admirals Benham and Ramsay. It lasted from September 12 to the middle of December, 1901. Judge-Advocate General Lemly, assisted by the solicitor of his office, Mr. E. P. Hanna, both of whom made able arguments, put in with great care and fairness the evidence of the witnesses summoned by them, while Admiral Schley was represented with distinguished animation and force by Hon. Isidor Raynor, a leading member of the Baltimore bar. The attendance was large and the public interest great. An appeal was taken to the President, but without changing the result, and the finding and opinion of the court therefore stand as the historical record.

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